

RECORD REPRODUCTION COVER SHEET

The attached records are:

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Subject:

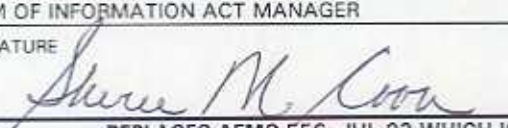
F33615-97-D-1045

FOIA Control Number:

03-0901K

Date Reproduced:

FREEDOM OF INFORMATION ACT (FOIA) RESPONSE AND INVOICE

REQUEST DATE <div style="text-align: center;">20021204</div>		REQUEST NUMBER 03-090LK		
TO Veridian Attn: Briann Burgel 5200 Springfield Pike, Suite 200 Dayton OH 45431-1289		FROM 88 CG/SCCMF (FOIA Office) Building 676 Rm 150 2435 5th Street Area B Wright-Patterson AFB OH 45433		
1. REQUESTED RECORDS				
<input checked="" type="checkbox"/> COMPLETELY RELEASED		<input type="checkbox"/> PARTIALLY RELEASABLE		
<input checked="" type="checkbox"/> DOCUMENTS ARE ATTACHED				
DOCUMENTS WILL BE FORWARDED ON RECEIPT OF PAYMENT				
DOCUMENTS MAY BE VIEWED AT THIS LOCATION (Please call for an appointment)				
TIME EXTENSION IS REQUIRED BECAUSE				
ALL OR PART OF THE REQUESTED RECORDS ARE NOT AT THIS LOCATION				
VOLUMINOUS RECORDS MUST BE COLLECTED AND REVIEWED				
RECORDS ARE BEING REVIEWED BY ANOTHER AGENCY FOR POSSIBLE RELEASE				
WE HOPE TO PROVIDE A FINAL DECISION BY				
2. THE COSTS OF PROVIDING THESE DOCUMENTS ARE INDICATED BELOW				
REQUEST ACTIONS	RATE	MATERIAL	TIME	COST
SEARCH (Hourly)	\$44.00		1.00	\$44.00
REVIEW (Hourly)	\$44.00		1.00	\$44.00
COPY (Page)	\$0.15	254		\$38.10
COMPUTER MACHINE TIME (Hourly)				
COMPUTER OPERATOR TIME (Hourly)				
COMPUTER TAPES				
OTHER CD				
TOTAL AMOUNT DUE				\$126.10
3. Send your check or money order payable to "US DEPARTMENT OF TREASURY " with a copy of this invoice within 30 days. (Future requests will not be processed until payment is received.)		3A. MAIL TO 88 CG/SCCMF (FOIA Office) 2435 5th Street Area B Wright-Patterson AFB OH 45433		
4. THIS ACKNOWLEDGES RECEIPT OF YOUR CHECK OR MONEY ORDER FOR PAYMENT OF REQUESTED DOCUMENTS				
NUMBER	DATE	AMOUNT		
5. ALL OR PART OF THE INFORMATION YOU REQUESTED IS NOT AVAILABLE AT THIS INSTALLATION. WE HAVE FORWARDED YOUR REQUEST TO THE FOLLOWING LOCATION FOR ACTION WITH DIRECT RESPONSE TO YOU.				
6. COMMENTS Attached: 1 - Your FOIA Request 2 - Requested Records Point of Contact (FOIA) is Lynn Kane at (937) 904-8189				
7. FREEDOM OF INFORMATION ACT MANAGER				
NAME AND PHONE Sheree M. Coon (937) 904-8207	SIGNATURE 		DATE 19 Dec 02	



5200 Springfield Pike
Suite 200
Dayton, Ohio 45431-1289
Tel: 937.253.4770
Fax: 937.476.2900
www.veridian.com

December 4, 2002

O. P. R. AFRL/SNK
CONTROL # 03-090LK
DUE DATE 27 DEC 02

88 CG/SCCIADF, Building 16
2275 D Street, Room 0047
WPAFB, OH 45433-7220

ATTENTION: FOIA Manager

SUBJECT: FOIA Request for Contract No. ~~F33600-00-D-0015~~

LK, per conv. w/ Req.
12/11

Under the Freedom of Information Act, Veridian Engineering requests one copy of the releasable contractual information including the contract and delivery orders for TRW's Advanced Concepts Exploration (ACE) facility support contract (F336-15-97-D-1045).

We understand that a reproduction charge is payable. If that amount exceeds \$200.00, please notify the undersigned at 937-476-2518 prior to proceeding. Please forward these documents to the following address:

Veridian Engineering
Attn: Bricann Burgel
5200 Springfield Pike, Suite 200
Dayton, OH 45431-1255

If you have any questions regarding this request, please let me know (937-476-2518). Thank you for your prompt attention to this matter.

Sincerely,

VERIDIAN ENGINEERING

A handwritten signature in dark ink, appearing to read "Bricann Burgel".
Bricann L. Burgel
Business Development Specialist

xc: Ed Lehman

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 2	
2. AMENDMENT/MODIFICATION NO. 02		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 SUSAN L. SOUTHERS (937)656-9828 susan.southers@wpafb.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. RADIO SYSTEMS ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314 See DD254 for Cleared Address CODE 65409 FACILITY CODE				MAILING DATE DEC 12 2002			
				(X) 9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0005			
				10B. DATED (SEE ITEM 13) 29 JUL 2002			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$150,000.00 PROJECT ENGINEER: Lydia Harris, AFRL/SNRW, 937-255-2766 Ext 4186 & Denise Jacobs, AFRL/SNRW, 937-255-4854 Ext. 4160 FINANCE OFFICE: DFAS-CO/WEST ENTITLEMENT OPER, PO BOX 182381, COLUMBUS, OH 43218-2381 (CODE:HQ0339)							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				15A. NAME AND TITLE OF SIGNER (Type or print)			
				DAVID L. SHELLABARGER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		15B. UNITED STATES OF AMERICA		15C. DATE SIGNED	
				David L. Shellabarger BY _____ (Signature of Contracting Officer)		10 Dec 02	
(Signature of person authorized to sign)							

1. Pursuant to the "Limitation of Funds" clause of the contract the above numbered contract is hereby modified by increasing the amount allotted in paragraph 2 of Section B by \$150,000.00, thereby making a revised amount obligated of \$359,000.00 which covers all contractual items through 30 Apr 03. The dollar amount and time specified are in accordance with the contractor's e-mail dated 9 Dec 02, incorporated herein by reference.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000102	CLIN Establish <i>Noun:</i> ACRN:	Funding Info Only AB	+\$150,000.00

b. Section G - Contract Administration/Payment Data is revised as follows:


ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AB	ACRN Establish 57 33600 293 ETLA 673028 012340 00000 35164F 503000 F03000 <i>New ACRN Amount:</i> \$150,000.00 <i>Funding breakdown:</i> On CLIN 000102: +\$150,000.00 <i>PR/MIPR:</i> GWSSN037200114 \$150,000.00 <i>JON:</i> 666A0200 <i>Descriptive data:</i> RCCC: 6SRW00 Complete Reference MIPR Number N000CZ03730036 dated 26 Nov 02.	\$150,000.00

Payment Instructions:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	209,000.00
AB	000102	150,000.00
Total		359,000.00

3. All terms and conditions remain unchanged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 01		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ.NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 COURTNEY L. MCLANE 937-255-2851 courtney.mclane@wpafb.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. RADIO SYSTEMS ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314 See DD254 for Cleared Address CODE 65409 FACILITY CODE				MAILING DATE SEP 30 2002		9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0005 10B. DATED (SEE ITEM 13) 29 JUL 2002	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(c). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: X D. OTHER (Specify type of modification and authority) Limitation of Funds Clause							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: Incremental Funding; CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$199,000.00 (Increase) PROJECT ENGINEER: Lydia Harris, AFRL/SNRW, 937-255-2766 Ext. 4186 & Denise Jacobs, AFRL/SNRW, 937-255-4854 Ext. 4160 FINANCE OFFICE: DFAS-CO/WEST ENTITLEMENT OPER, PO BOX 182381, COLUMBUS, OH, 43218-2381 (CODE HQ0339) CONTRACTING OFFICER'S EMAIL ADDRESS IS david.shellabarger@wpafb.af.mil Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				DAVID L. SHELLABARGER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				 BY (Signature of Contracting Officer)		27 Sep 02	
(Signature of person authorized to sign)							

1. Pursuant to the 'Limitation of Funds' clause of the contract, the above numbered contract is hereby modified by increasing the amount allotted in paragraph 2 of Section B by \$199,000.00, thereby making a revised amount obligated of \$209,000.00 which covers all contractual items through 15 December 2002. The dollar amount and time specified are in accordance with the contractor's email dated 26 September 2002, incorporated herein by reference.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000101	CLIN Change Noun: ACRN:	Funding Info Only AA	+\$199,000.00

b. Section G - Contract Administration/Payment Data is revised as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AA	ACRN Change 57 23600 292 47GB 696999 H26140 59700 000000 667100 F67100 New ACRN Amount: \$209,000.00 Funding breakdown: On CLIN 000101: +\$199,000.00 PR/MIPR: GWSSN027201112 \$90,000.00 GWSSN027201120 \$109,000.00 JON: 666A0200 Descriptive data: FY02 Incremental Funding RCCC: 6SRW00 MIPR Nos.: DD044853N2746S214, dtd 23 Aug 02 DD044853N2746S213/01, dtd 23 Aug 02 COMPLETE	+\$199,000.00

c. Payment Instructions:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

<u>ACRN</u>	<u>CLIN</u>	<u>AMOUNT</u>
AA	000101	\$ 209,000.00

Total Of All CLINs	\$209,000.00
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3. Except as noted above, all terms and conditions of subject delivery order remain unchanged.

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 6

1. CONTRACT/PURCH ORDER/AGREEMENT NO. F33615-97-D-1045		2. DELIVERY ORDER/ CALL NO. 0005		3. DATE OF ORDER/CALL (YYYYMMDD)		4. REQUISITION/PURCH REQUEST NO. SEE SCHEDULE		5. PRIORITY DO-A7				
6. ISSUED BY AFRL/SNKD USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 SCOTT A. SIZEMORE (937) 255-4149 scott.sizemore@wpafb.af.mil				7. ADMINISTERED BY (If Other than S) DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241 SCD: C PAS: (NONE)		8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)						
9. CONTRACTOR NAME AND ADDRESS TRW INC. RADIO SYSTEMS ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314 See DD254 for Cleared Address				10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE		11. X IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED						
14. SHIP TO SEE SCHEDULE				15. PAYMENT WILL BE MADE BY DFAS-CO/WEST ENTITLEMENT OPER P O BOX 182381 COLUMBUS OH 43218-2381 EFT:T		13. MAIL INVOICES TO ADDRESS IN BLOCK SEE BLOCK 15 (PAYMENT OFFICE)						
16. TYPE OF ORDER		DELIVERY/ CALL <input checked="" type="checkbox"/>		This delivery order is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.								
		PURCHASE <input type="checkbox"/>		Reference your _____ furnish the following on items specified herein.								
ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.												
NAME OF CONTRACTOR _____ SIGNATURE _____ TYPED NAME AND TITLE _____ DATE SIGNED (YYYYMMDD) _____												
If this box is marked, supplier must sign Acceptance and return the following number of copies: _____												
17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE SEE SCHEDULE												
18. ITEM NO.		19. SCHEDULE OF SUPPLIES/SERVICES			20. QUANTITY ORDERED/ ACCEPTED*		21. UNIT		22. UNIT PRICE		23. AMOUNT	
24. UNITED STATES OF AMERICA *If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle. DAVID L. SHELLABARGER BY: <i>David L. Shellabarger</i> 29 Jul 02 CONTRACTING/ORDERING OFFICER				25. TOTAL \$2,431,689.00				26. DIFFERENCES				
26. QUANTITY IN COLUMN 20 HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED				27. SHIP NO.		28. D.O. VOUCHER NO.		29. INITIALS				
DATE _____ SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____				32. PAYMENT <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR				
36. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT.				32. COMPLETE				34. CHECK NUMBER				
DATE _____ SIGNATURE AND TITLE OF CERTIFYING OFFICER _____				32. PARTIAL				35. BILL OF LADING				
37. RECEIVED AT		38. RECEIVED BY (Print)		39. DATE RECEIVED (YYYYMMDD)		40. TOTAL CONTAINERS		41. S/R ACCOUNT NO.		42. S/R VOUCHER NO.		

1. Pursuant to FAR Part 52.216-18, the "Ordering" clause of the basic contract (Contract F33615-97-D-1045), Delivery Order 0005 is hereby issued. The amount established for Delivery Order 0005 is as follows:

Estimated Cost:	\$2,251,959.00
Fixed Fee:	\$ 179,730.00
Total:	\$2,431,689.00

2. The amount allotted is \$10,000.00, which covers all contractual items for Delivery Order 0005 through 31 Jul 02 per Contractor's email dated 9 Jul 02.

3. Pursuant to FAR Part 52.244-02, Subcontracts - Alternate I, the contractor is authorized to purchase the subcontracted services in the amount of \$466,573.00, materials in the amount of \$1,070,119.00, and other direct costs in the amount of \$8,952.00 under this delivery order as proposed in the contractor's proposal, dated 23 May 02.

4. Pursuant to FAR Part 52.244-02, Subcontracts - Alternate I, the contractor is authorized to purchase materials and services from MACB in the amount of \$177,363.00, Veridian Engineering in the amount of \$99,210.00, and Technical Services in the amount of \$190,000.00.

5. Pursuant to FAR Part 52.245-05, Government Property (Cost-Reimbursement, Time-And-Material, or Labor-Hour Contracts), the contractor is authorized to have or use GFE/GFI/GFP during performance of this delivery order. A complete listing of GFE/GFI/GFP applicable to this program is included in the basic contract. Any GFE provided during the period of performance of this delivery order will be returned to AFRL/SNRW, 2241 Avionics Circle, Building 620, WPAFB OH 45433.

6. As a result of paragraphs 1 and 2, the contract is modified as follows:

a. SECTION B - Supplies or Services, is established as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0001		1	\$2,431,689.00
		Each	\$2,431,689.00
	Noun:	RESEARCH AND DATA	
	ACRN:	9	
	NSN:	N - Not Applicable	
	DD1423 is Exhibit:	A	
	Contract type:	U - COST PLUS FIXED FEE	
	Inspection:	DESTINATION	
	Acceptance:	DESTINATION	
	FOB:	DESTINATION	
	Descriptive Data:		
	Conduct Research entitled "Advanced Concepts Exploration (ACE) Program Delivery Order 0005" in accordance with the attached delivery order description dated 23 May 02. Deliver data in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423, of the Basic contract and the attached delivery order description.		

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000101	<i>Noun:</i> Funding Info Only <i>ACRN:</i> AA <i>Descriptive Data:</i> FY02 Incremental Funding JON: 666A0200 RCCC: 6SRW00 MIPR Nos.: DD044853N2746S107 and DD044853N2746S123		
0002	<i>Noun:</i> SOFTWARE <i>ACRN:</i> U <i>NSN:</i> N - Not Applicable <i>DD1423 is Exhibit:</i> A <i>Contract type:</i> U - COST PLUS FIXED FEE <i>Inspection:</i> DESTINATION <i>Acceptance:</i> DESTINATION <i>FOB:</i> DESTINATION <i>Descriptive Data:</i> Conduct Research entitled "Advanced Concepts Exploration (ACE) Program Delivery Order 0005" in accordance with the attached delivery order description dated 23 May 02. Deliver data in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423, of the Basic contract and the attached delivery order description.	1 Each	NSP NSP
0003	<i>Noun:</i> HARDWARE <i>ACRN:</i> U <i>NSN:</i> N - Not Applicable <i>DD1423 is Exhibit:</i> A <i>Contract type:</i> U - COST PLUS FIXED FEE <i>Inspection:</i> DESTINATION <i>Acceptance:</i> DESTINATION <i>FOB:</i> DESTINATION <i>Descriptive Data:</i> Conduct Research entitled "Advanced Concepts Exploration (ACE) Program Delivery Order 0005" in accordance with the attached delivery order description dated 23 May 02. Deliver data in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423, of the Basic contract and the attached delivery order description.	1 Each	NSP NSP

b. SECTION F - Deliveries or Performance, is established as follows:

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
0001		1	FA8650			30 Apr 2004
	<i>Noun:</i> RESEARCH AND DATA <i>ACRN:</i> 9 <i>Descriptive Data:</i> The scheduled delivery date for the approved final technical report is 30 Apr 04. All data shall be delivered in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423 of the Basic contract. The initial submittal of the draft final report shall be accomplished no later than 31 Jan 04. See DD Form 1423 for mailing address.					
0002		1	FA8650			ASREQ
	<i>Noun:</i> SOFTWARE <i>ACRN:</i> U <i>Descriptive Data:</i> The scheduled delivery date for the approved final technical report is 30 Apr 04. All data shall be delivered in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423 of the Basic contract. The initial submittal of the draft final report shall be accomplished no later than 31 Jan 04. See DD Form 1423 for mailing address.					
0003		1	FY1456			ASREQ
	<i>Noun:</i> HARDWARE <i>ACRN:</i> U <i>Descriptive Data:</i> The scheduled delivery date for the approved final technical report is 30 Apr 04. All data shall be delivered in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423 of the Basic contract. The initial submittal of the draft final report shall be accomplished no later than 31 Jan 04. See DD Form 1423 for mailing address.					

c. SECTION G - Contract Administration Data, is established as follows:

(1) Payment Instructions are hereby established as follows:

PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the contract and recapped below. Exhaust the funds in each ACRN before using the funds from the next listed ACRN.

ACRN	SUBCLIN No.	TOTAL OBLIGATED
AA	000101	\$10,000.00
TOTAL OBLIGATED		\$10,000.00

(2) ACRN AA is hereby established as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AA	57 23600 292 47GB 696999 H26140 59700 000000 667100 F67100 Funding breakdown: On CLIN 000101: \$10,000.00 PR/MIPR: GWSSN027200594 \$10,000.00 JON: 666A0200 Descriptive data: FY02 Incremental Funding RCCC: 6SRW00 MIPR Nos.: DD044853N2746S107 and DD044853N2746S123	\$10,000.00

d. SECTION J - List of Attachments, is established as follows:

DOCUMENT	PGS	DATE	TITLE
ATTACHMENT 1	3	23 MAY 2002	ADVANCED CONCEPTS EXPLORATION PROGRAM (ACE) DELIVERY ORDER 0005 STATEMENT OF WORK (SOW)

**CONTRACT F33615-97-D-1045
(Delivery Order 0005 Contract)**

**Advanced Concepts Exploration Program
(ACE)**

TRW Radio Systems

**Delivery Order 0005
Statement of Work**

23 May 02

STATEMENT OF WORK (SOW)
FOR
DELIVERY ORDER 0005

1.0 OBJECTIVES

The objective of this Delivery Order (DO) is to promote research and development (R&D) and perform in-house assessments of Global Positioning System (GPS) anti-jam concepts and develop corresponding hardware-in-the-loop simulation technologies to evaluate performance.

2.0 REQUIREMENTS

The Contractor shall plan, manage, and accomplish the tasks set forth below:

- 2.1 Contractor shall upgrade existing GPS test capabilities to support evaluations in the Advanced Concepts Exploration (ACE) facility.
- 2.2 Contractor shall design and develop prototype hardware for proof-of-concept and risk reduction.
- 2.3 Contractor shall conduct mission and performance analyses for the impact of ionospheric scintillation on the GPS navigation signal and its effect on the user.
- 2.4 Contractor shall conduct technology/feasibility studies of advanced technologies as a basis for future R&D applications.
- 2.5 Contractor shall develop and implement innovative approaches to modify, enhance and maintain current Antenna Wavefront Simulator capabilities.
- 2.6 Contractor shall perform demonstrations of processes and techniques in support of electronic warfare (EW) and GPS research.
- 2.7 Contractor shall conduct bench-level tests and evaluations of GPS user equipment.
- 2.8 Contractor shall conduct mission capability and performance analyses and provide technical support for GPS Interference and Navigation Tool (GIANT) applications.
- 2.9 Contractor shall fabricate hardware and calibrate unique and special purpose equipment, as required. Calibration of general-purpose laboratory test equipment shall be kept current according to the Government's Precision Measurement Equipment Laboratory (PMEL) schedule.

- 2.10 Contractor shall enter associate agreements with original equipment manufacturers, subcontractors, and/or other specialists that are critical to satisfy requirements for providing equipment maintenance, specialized support and unique capabilities for Branch applications. Contractor shall enter into non-disclosure agreements with other contractors, if required to complete tasks under this DO.
- 2.11 Contractor shall provide materials, replacement components and parts in a timely manner to prevent or eliminate malfunctions, enhance or upgrade capabilities, or improve performance requirements in the ACE facility. Contractor shall make hardware and software procurements and developments, as required for ACE facility enhancements.
- 2.12 Contractor shall design, develop, integrate and test software in the ACE facility. System backups, commercial software upgrades and computer security certification and accreditation packages will be kept current.

ORDER FOR SUPPLIES OR SERVICES

PAGE 1 OF 6

1. CONTRACT/PURCH ORDER/AGREEMENT NO. F33615-97-D-1045		2. DELIVERY ORDER/ CALL NO. 0004		3. DATE OF ORDER/CALL (YYYYMMDD) 00NOV08		4. REQUISITION/PURCH REQUEST NO. SEE SECTION G		5. PRIORITY DO-A7	
6. ISSUED BY AFRL/SNKD USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil				7. ADMINISTERED BY (If Other than 6) DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241 SCD: C PAS: (NONE)		8. DELIVERY FOB <input checked="" type="checkbox"/> DESTINATION <input type="checkbox"/> OTHER (See Schedule if other)			
9. CONTRACTOR TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address				10. DELIVER TO FOB POINT BY (Date) (YYYYMMDD) SEE SCHEDULE		11. X IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISAD- VANTAGED <input type="checkbox"/> WOMEN- OWNED			
14. SHIP TO SEE SCHEDULE				15. PAYMENT WILL BE MADE BY DFAS-COWEST ENTITLEMENT OPER P O BOX 182381 COLUMBUS OH 43218-2381 EFT:T		13. MAIL INVOICES TO ADDRESS IN BLOCK SEE BLOCK 15 (PAYMENT OFFICE)			
16. DELIVERY/ CALL TYPE OF ORDER		<input checked="" type="checkbox"/> This delivery order is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract. <input type="checkbox"/> Reference your _____ furnish the following on items specified herein. ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.							
NAME OF CONTRACTOR		SIGNATURE		TYPED NAME AND TITLE		DATE SIGNED (YYYYMMDD)			
If this box is marked, supplier must sign Acceptance and return the following number of copies: _____ 17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE See Section G									
18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES				20. QUANTITY ORDERED/ ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT	
*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.				24. UNITED STATES OF AMERICA BETHE L. STEELY BY: <i>Bethe L. Steely</i> 8 Nov 00 CONTRACTING ORDERING OFFICER			25. TOTAL \$2,486,813.00 29. DIFFERENCES		
26. QUANTITY IN COLUMN 20 HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED				27. SHIP NO.		28. D.O. VOUCHER NO.		30. INITIALS	
DATE SIGNATURE AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE				32. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		32. PAID BY		33. AMOUNT VERIFIED CORRECT FOR	
31. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT. DATE SIGNATURE AND TITLE OF CERTIFYING OFFICER								34. CHECK NUMBER	
								35. BILL OF LADING	
37. RECEIVED AT	38. RECEIVED BY (Print)	39. DATE RECEIVED (YYYYMMDD)	40. TOTAL CONTAINERS	41. S/R ACCOUNT NO.	42. S/R VOUCHER NO.				

A. Pursuant to Section B, paragraph 2 of the Basic contract, the amount established for Delivery Order number 0004 is as follows:

Delivery Order Cost: \$2,308,532.00
Delivery Order Fee: \$178,281.00
TOTAL CPFF: \$ 2,486,813.00

B. The amount allotted is \$40,000.00 which covers all contractual items under Delivery Order Number 0004 through 31JAN01. This amount is in accordance with the contractor's email dated 01NOV00, incorporated herein by reference.

C. Section B - Supplies or Services is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty	Unit Price
		Purch Unit	Total Item Amount
0001		1	\$2,456,813.00
		LO	\$2,456,813.00
	<i>Noun:</i>	RESEARCH AND DATA	
	<i>ACRN:</i>	9	
	<i>Security:</i>	U	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>		

Conduct Research in accordance with Statement of Work (SOW) entitled, "Advanced Concepts Exploration Program", dated 11SEP00 included as Attachment 1 to this Delivery Order. Data is required in accordance with the Contract Data Requirements List (CDRL) of the basic contract.

000101	<i>Noun:</i>	Funding Info Only	
	<i>ACRN:</i>	AA	\$10,000.00
	<i>Descriptive Data:</i>		

0002		1	\$30,000.00
		LO	\$30,000.00
	<i>Noun:</i>	OTHER - NON-DEVELOPMENT ITEM (NDI) HARDWARE EVALUATIONS	
	<i>ACRN:</i>	AB	
	<i>Security:</i>	U	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>		

Provide hardware in accordance with the Statement of Work (SOW) for Delivery Order #4, dated 11SEP00.

D. Section F - Deliveries or Performance is modified as follows:

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
0001		1	U			11 Nov 2002

Noun: RESEARCH AND DATA
ACRN: 9
Sec. Class: U
Descriptive Data:

The scheduled delivery date for the approved final technical report is 11NOV2002. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11SEP00, Attachment 1 to this delivery order.

0002		1	U			11 Nov 2002
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Noun: OTHER - NON-DEVELOPMENT ITEM (NDI)
HARDWARE EVALUATIONS
ACRN: AB
Sec. Class: U
Descriptive Data:

The scheduled delivery date for the approved final technical report is 11NOV2002. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11SEP00, Attachment 1 to this delivery order.

E. Section G - Contract Administration Data is modified as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
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AA

57 03600 290 47GB 696999 H26140 59700 000000 667100 F67100

\$10,000.00

Funding breakdown: On CLIN 000101: \$10,000.00*PR/MIPR:* GWSSN007205875 \$10,000.00*JON:* 666A0200 *WBS:**Descriptive data:**JON:* 666A0200*CCC:* 6SAR00*REF:* DD Form 448, Number N46TG005300243, dated 22AUG00.

AB

57 03010 110 3620 11C17A 010100 00000 000000 503000 F03000

\$30,000.00

Funding breakdown: On CLIN 0002: \$30,000.00*PR/MIPR:* GWSSN017200066 \$30,000.00*JON:* 666A0200 *WBS:**Descriptive data:**JON:* 666A0200*CCC:* 6SAR00*COMPLETE**REF:* DD Form 448 #NRYCF000072911, dated 15SEP00

F. Section J - List of Attachments and Exhibits is modified as follows:

DOCUMENT	PGS	DATE	TITLE
ATTACHMENT 1	1	11 SEP 2000	STATEMENT OF WORK ENTITLED, "AVIONICS CONCEPTS EXPLORATION".

STATEMENT OF WORK (SOW)
AVIONICS CONCEPTS EXPLORATION
FOR
DELIVERY ORDER 04


1.0 OBJECTIVES

The objective of this Delivery Order is to promote research and development and perform evaluations in the Advanced Concepts Exploration (ACE) Laboratory in support of the Global Positioning System (GPS) Modernization initiative.

2.0 REQUIREMENTS

The Contractor shall plan, manage, and accomplish the tasks set forth below:

- 2.1 Contractor shall support the design, development and implementation of the next generation Antenna WaveFront Simulator (AWFS).
- 2.2 Contractor shall develop and implement innovative approaches to modify, enhance and maintain current AWFS capabilities.
- 2.3 Contractor shall conduct bench-level tests and evaluations of GPS user equipment.
- 2.4 Contractor shall provide technical support for GPS Interference and Navigation Tool (GIANT) applications.
- 2.5 Contractor shall fabricate hardware and calibrate unique and special purpose equipment, as required. Calibration of general-purpose laboratory test equipment shall be kept current according to the Government's Precision Measurement Equipment Laboratory (PMEL) schedule.
- 2.6 Contractor shall enter associate agreements with original equipment manufacturers, subcontractors, and/or other specialists that are critical to satisfy requirements for providing specializing support and unique capabilities. Contractor shall enter into non-disclosure agreements with other contractors, if required to complete tasks under this DO.
- 2.7 Contractor shall provide materials, replacement components and parts in a timely manner to prevent or eliminate malfunctions, enhance or upgrade capabilities, or improve performance requirements in the ACE facility. Contractor shall make hardware and software procurements and developments, as required for ACE facility enhancements.
- 2.8 Contractor shall design, develop, integrate and test software in the ACE facility. System backups and commercial software upgrades will be kept current.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF	PAGE OF PAGES 1 of 3
AMENDMENT/MODIFICATION NO. 15		3. EFFECTIVE DATE FA8650		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE	
ISSUED BY AFRL/SNKD CODE		7. ADMINISTERED BY (If other than Item 6)		5. PROJECT NO. (If applicable) CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 COURTNEY L. MCLANE 937-255-2851 courtney.mclane@wpafb.af.mil		DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314				(X)	9A. AMENDMENT OF SOLICITATION NO.
					9B. DATED (SEE ITEM 11)
				X	10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004
					10B. DATED (SEE ITEM 13) 08 NOV 2000
CODE 65409		FACILITY CODE		11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS	
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: X D. OTHER (Specify type of modification and authority) Limitation of Funds Clause					
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$287,236 (INCREASE) PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNRW, 937-255-2766 EXT. 4186 FINANCE OFFICE: DFAS-CO/WEST ENTITLEMENT OPERATIONS, PO BOX 182381, COLUMBUS, OH 43218-2381 (HQ0339) Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF SIGNER (Type or print)			
		MICHAEL A. CRAMER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA	
				16C. DATE SIGNED	
(Signature of person authorized to sign)		 (Signature of Contracting Officer)		08 November 02	

1. Pursuant to the 'Limitation of Funds' clause of the contract, the above numbered contract is hereby modified by increasing the amount set forth in Section B by \$287,236, thereby making a revised amount obligated of \$1,613,361 which covers all contractual items through 1 April 2003. The dollar amount and time specified are in accordance with the contractor's email dated 7 November 2002, incorporated herein by reference.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000112	CLIN Establish Noun: ACRN:	Funding Info Only AN	+\$287,236.00

b. Section G - Contract Administration/Payment Data is revised as follows:


ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AN	ACRN Establish 57 33600 293 47WL 635034 6SRW00 00000 63500F 503000 F03000 New ACRN Amount: \$287,236.00 Funding breakdown: On CLIN 000112: +\$287,236.00 PRIMIPR: GWSSN037200019 \$287,236.00 JON: 666A0200 Descriptive data: RCCC #: 6SRW00 JON: 666A0200 PR COMPLETE	\$287,236.00

c. Payment Instructions:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	CLIN	DOCUMENT	AMOUNT
AA	000101	BASIC	\$10,000.00
AB	0002	BASIC	\$30,000.00
		000411	-\$30,000.00
	0002AA	000411	\$30,000.00
AC	000102	000401	\$20,000.00
AD	000103	000402	\$30,000.00
AE	000104	000403	\$22,000.00
AF	000105	000403	\$165,000.00
	000107	000405	\$50,000.00
		000406	\$10,000.00
		000407	\$10,000.00
AG	000106	000404	\$170,000.00
AH	000108	000408	\$4,282.00
AJ	000109	000408	\$286,343.00
		000409	\$27,000.00
		000410	\$29,500.00
		000411	\$50,000.00
AK	000110	000410	\$167,000.00
		000412	\$90,000.00
		000413	\$60,000.00
		000414	\$0.00
AL	000111	000410	\$55,000.00
		000414	\$30,000.00
AM	0002AB	000411	\$10,000.00
AN	000112	000415	\$287,236.00
Total Of All CLINs			\$1,613,361.00

3. Except as noted above, all terms and conditions of subject delivery order remain unchanged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 14		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKG CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. EWERS (937) 255-5915 steven.ewers@afri.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314				MAILING DATE OCT 21 2002		9A. AMENDMENT OF SOLICITATION NO.	
				X		9B. DATED (SEE ITEM 11)	
						10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004	
						10B. DATED (SEE ITEM 13) 08 NOV 2000	
CODE 65409		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
X D. OTHER (Specify type of modification and authority) Limitation of Funds Clause							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
SUBJECT: Incremental Funding CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$30,000 (Increase) PROJECT ENGINEER: Lydia Harris, AFRL/SNRW, 937/255-2766 Ext. 4186 and Denise Jacobs, AFRL/SNRW, 937/255-4854, Ext. 4160 FINANCE OFFICE: DFAS-CO/WEST Entitlement Operations, PO Box 182381, Columbus, OH 43218-2381(HQ0339)							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				15A. NAME AND TITLE OF SIGNER (Type or print)			
				STEVEN L. EWERS Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		15B. UNITED STATES OF AMERICA		15C. DATE SIGNED	
				BY  (Signature of Contracting Officer)		18 Oct 02	
(Signature of person authorized to sign)							

1. Pursuant to the "Limitation of Funds" clause of the basic contract, the above numbered delivery order is hereby modified by increasing the amount obligated by \$30,000.00, thereby making a revised dollar amount obligated of \$1,326,125.00 which covers all contractual items through 30 Nov 02. The dollar amount and time specified are in accordance with the contractor's E-Mail dated 8 Oct 02, incorporated herein by reference. In addition, an administrative change is made to the above numbered delivery order to clarify MIPR number information for ACRN AK.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000111	CLIN Change Noun: Funding Info Only ACRN: AL Descriptive Data: Modification 14 increase \$30,000.00		+\$30,000.00

b. Section G - Contract Administration/Payment Data is revised as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AK	ACRN Revision 57 23600 292 47GB 696999 H26140 59700 000000 667100 F67100 Total ACRN Amount: \$317,000.00 Funding breakdown: On CLIN 000110: +\$0.00 JON: 666A0200 Descriptive data: Administrative Change to Clarify MIPR Numbers JON: 666A0200 CCC: 6SRW00 MIPR #DD044853N2746S107 dtd 25 Mar 02 - \$167,000.00 (Order 0004, Modification 10) MIPR #DD044853N2746S12301 dtd 20 Aug 02 - \$90,000.00 (Order 0004, Modification 12) MIPR #DD44853N2746S221 dtd 11 Sep02 - \$60,000.00 (Order 0004, Modification 13) Reference: Complete	+\$0.00

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AL	ACRN Revision	+\$30,000.00
	57 23600 292 3621 674515 000000 00000 27325F 503000 F03000	
	New ACRN Amount: \$85,000.00	
	Funding breakdown: On CLIN 000111: +\$30,000.00	
	PR/MIPR: GWSSN037200007 \$30,000.00	
	JON: 666A0200	
	Descriptive data:	
	JON: 666A0200	
	CCC: 6SRW00	
	MIPR #NFY76210290752 dtd 16 Apr 02 - \$55,000.00 (Order 0004, Modification 10)	
	MIPR #NFY7621029075201 dtd 2 Oct 02 - \$30,000.00 (Order 0004, Modification 14)	
	Reference: Complete	

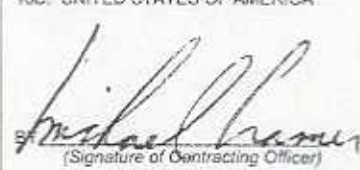
PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below: Exhaust the funds in each ACRN before using funds from the next listed ACRN.

SUBCLIN NO	ACRN	TOTAL OBLIGATED
000101	AA	\$10,000.00
0002AA	AB	\$30,000.00
000102	AC	\$20,000.00
000103	AD	\$30,000.00
000104	AE	\$22,000.00
000105	AF	\$165,000.00
000106	AG	\$170,000.00
000107	AF	\$70,000.00
000108	AH	\$4,282.00
000109	AJ	\$392,843.00
000110	AK	\$317,000.00
000111	AL	\$85,000.00
0002AB	AM	\$10,000.00

Total Obligated	\$1,326,125.00
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3. Except as noted above, All other terms and conditions remain unchanged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 13		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 COURTNEY L. MCLANE 937-255-2851 courtney.mclane@wpafb.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314				MAILING DATE SEP 20 2002		(X) 9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
				X		10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004	
						10B. DATED (SEE ITEM 13) 08 NOV 2000	
CODE 65409		FACILITY CODE		11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS			
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
X D. OTHER (Specify type of modification and authority) Limitation of Funds Clause							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: Incremental Funding CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$60,000.00 (Increase) PROJECT ENGINEER: Lydia Harris, AFRL/SNRW, 937-255-2766 Ext. 4186 & Denise Jacobs, AFRL/SNRW, 937-255-4854 Ext. 4160 FINANCE OFFICE: DFAS-CO/WEST Entitlement Operations, PO Box 182381, Columbus, OH 43218-2381 (HQ0339)							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				MICHAEL A. CRAMER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		18 September 02	

1. Pursuant to the 'Limitation of Funds' clause of the contract, the above numbered contract is hereby modified by increasing the amount set forth in Section B by \$60,000.00, thereby making a revised amount obligated of \$1,296,125.00 which covers all contractual items through 15 December 2002. The dollar amount and time specified are in accordance with the contractor's email dated 17 September 2002, incorporated herein by reference.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000110	CLIN Change Noun: ACRN: Descriptive Data: Modification 12 increase \$90,000.00 Modification 13 increase \$60,000.00	Funding Info Only AK	+\$60,000.00

b. Section G - Contract Administration/Payment Data is revised as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AK	ACRN Change 57 23600 292 47GB 696999 H26140 59700 000000 667100 F67100 New ACRN Amount: \$317,000.00 Funding breakdown: On CLIN 000110: +\$60,000.00 PRIMIPR: GWSSN027201103 \$60,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 MIPR #DD044853N2746S107 dtd 25 Mar 02 MIPR #DD44853N2746S221 dtd 11 Sep02 Reference: Complete	+\$60,000.00


c. Payment Instructions:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	CLIN	DOCUMENT	AMOUNT
AA	000101	BASIC	\$10,000.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 4

2. AMENDMENT/MODIFICATION NO. 12		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 COURTNEY L. MCLANE 937-255-2851 courtney.mclane@wpafb.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314				MAILING DATE SEP 09 2002		(X) 9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
						10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004	
CODE 65409		FACILITY CODE		X 10B. DATED (SEE ITEM 13) 08 NOV 2000			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS; IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
X D. OTHER (Specify type of modification and authority) Limitation of Funds Clause and Mutual Agreement of the Parties							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: Incremental Funding and Revised Delivery Date CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$90,000.00 (Increase) PROJECT ENGINEER: Lydia Harris, AFRL/SNRW, (937) 255-4854 EXT 4168 FINANCE OFFICE: DFAS-CO/WEST Entitlement Operations, PO Box 182381, Columbus, OH 43218-2381 Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print) MICHAEL A. CRAMER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		09 September 2002	

1. Pursuant to the 'Limitation of Funds' clause of the contract, the above numbered contract is hereby modified by increasing the amount set forth in Section B by \$90,000.00, thereby making a revised amount obligated of \$1,236,125.00 which covers all contractual items through 08 November 2002. The dollar amount and time specified are in accordance with the contractor's email dated 03 September 2002, incorporated herein by reference. This modification also corrects the delivery dates for CLINS 0001 and 0002.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000110	CLIN Change <i>Noun:</i> <i>ACRN:</i> <i>Descriptive Data:</i> Modification 12 increase \$90,000.00	Funding Info Only AK +\$90,000.00	

b. Section F - Deliveries or Performance is modified as follows:

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
0001	<i>Noun:</i> <i>ACRN:</i> <i>Descriptive Data:</i> The scheduled delivery date for the approved final technical report is 30 April 2004. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11SEP00, Attachment 1 to this delivery order.	1	U			30 Apr 2004
						RESEARCH AND DATA 9
0002AA	<i>Noun:</i> <i>ACRN:</i> <i>Descriptive Data:</i> The scheduled delivery date for the approved final technical report is 30 April 2004. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11SEP00, Attachment 1 to this delivery order.	1	U			30 Apr 2004
						OTHER - NON-DEVELOPMENT ITEM (NDI) HARDWARE (C-17) AB

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
0002AB		1	U			30 Apr 2004

Noun:

OTHER - NON-DEVELOPMENTAL ITEM (NDI)

HARDWARE EVALUATIONS - AGNS

ACRN:

AM

Descriptive Data:

The scheduled delivery date for the approved final technical report is 30 April 04.
All data shall be delivered in accordance with the Statement of Work (SOW) dated 11 Sep 00, Attachment 1 to this delivery order.

c. Section G - Contract Administration/Payment Data is revised as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
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AK	ACRN Change	+ \$90,000.00
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57 23600 292 47GB 696999 H26140 59700 000000 667100 F67100

New ACRN Amount: \$257,000.00

Funding breakdown: On CLIN 000110: +\$90,000.00

PRIMIPR: GWSSN027201043 \$90,000.00

JON: 666A0200

Descriptive data:

JON: 666A0200

CCC: 6SRW00

MIPR #DD044853N2746S107 dtd 25 Mar 02

Reference: Complete

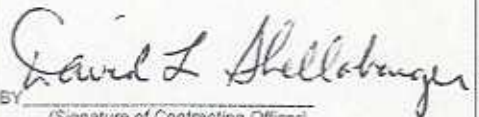
d. Payment Instructions:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	CLIN	DOCUMENT	AMOUNT
AA	000101	BASIC	\$10,000.00
AB	0002	BASIC	\$30,000.00
		000411	-\$30,000.00
	0002AA	000411	\$30,000.00
AC	000102	000401	\$20,000.00
AD	000103	000402	\$30,000.00
AE	000104	000403	\$22,000.00
AF	000105	000403	\$165,000.00
	000107	000405	\$50,000.00
		000406	\$10,000.00
		000407	\$10,000.00
AG	000106	000404	\$170,000.00
AH	000108	000408	\$4,282.00
AJ	000109	000408	\$286,343.00
		000409	\$27,000.00
		000410	\$29,500.00
		000411	\$50,000.00
AK	000110	000410	\$167,000.00
		000412	\$90,000.00
AL	000111	000410	\$55,000.00
AM	0002AB	000411	\$10,000.00

Total of All CLINs \$1,236,125.00

3. Except as noted above, all terms and conditions of subject delivery order remain unchanged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 5	
2. AMENDMENT/MODIFICATION NO. 11		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314				MAILING DATE JUL 30 2002			
				(X) 9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004			
CODE 65409		FACILITY CODE		X 10B. DATED (SEE ITEM 13) 08 NOV 2000			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause and Mutual Agreement of the Parties) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: CONTRACT LINE ITEM RESTRUCTURE AND INCREMENTAL FUNDING CHANGE IN CONTRACT VALUE: NONE CHANGE IN OBLIGATION: \$60,000.00 PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNRW, (937) 255-4654 EXT 4168 FINANCE OFFICE: DFAS-CO/WEST ENTITLEMENT OPERATIONS, PO BOX 182381, COLUMBUS, OH 43218-2381							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				DAVID L. SHELLABARGER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				BY  (Signature of Contracting Officer)		29 Jul 02	
(Signature of person authorized to sign)							

1. By Mutual Agreement of the Parties, the CLINs for the subject delivery order are restructured to decrease the Total Item Amount for CLIN 0001 and to increase the Total Item Amount for CLIN 0002, by adding SubCLINs. The purpose of this CLIN restructure is to capture the original intent of the parties when the delivery order was originally awarded. In addition, funding in the amount of \$60,000.00 is being added to the delivery order, thereby making a revised amount allotted of \$1,146,125.00, which covers all contractual items through 20 Sep 2002. The dollar amount and time specified are in accordance with contractor's email message dated 10 July 2002.

2. As a result of paragraph 1 above, the delivery order is revised as follows:

a. Section B, Supplies or Services, is revised as follows:

(1) CLIN 0001 is revised by decreasing the Total Item Amount by \$10,000.

(2) CLIN 0002 is revised by changing the CLIN to an InfoCLIN and adding SubCLINs 0002AA and 0002AB as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0001	CLIN Change		\$2,446,813.00
		Lot	-\$10,000.00
	<i>Noun:</i>	RESEARCH AND DATA	
	<i>Total Quantity:</i>	1	
	<i>New Total Item Amount:</i>	\$2,446,813.00	
	<i>ACRN:</i>	9	
	<i>NSN:</i>	N - Not Applicable	
	<i>DD1423 is Exhibit:</i>	A	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>		
	Conduct Research in accordance with Statement of Work (SOW) entitled, "Advanced Concepts Exploration Program", dated 11SEP00 included as Attachment 1 to this Delivery Order. Data is required in accordance with the Contract Data Requirements List (CDRL) of the basic contract.		
000109	CLIN Change		
	<i>Noun:</i>	Funding Info Only	
	<i>ACRN:</i>	AJ	+\$50,000.00
0002	CLIN Change	-1	
			-\$30,000.00
	<i>Noun:</i>	OTHER - NON-DEVELOPMENT ITEM (NDI) HARDWARE EVALUATIONS	
	<i>NSN:</i>	N - Not Applicable	
	<i>Descriptive Data:</i>		
	Provide hardware in accordance with the Statement of Work (SOW) for Delivery Order #4, dated 11SEP00.		

D. Section F - Deliveries or Performance is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0002AA	CLIN Establish	1	\$30,000.00
		Lot	\$30,000.00
	<i>Noun:</i>	OTHER - NON-DEVELOPMENT ITEM (NDI) HARDWARE (C-17)	
	<i>ACRN:</i>	AB	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	Provide Non-development Item (NDI) hardware evaluations in accordance with the Statement of Work (SOW) for Delivery Order #4, dated 11 Sep 00.	

0002AB	CLIN Establish	1	\$10,000.00
		Lot	\$10,000.00
	<i>Noun:</i>	OTHER - NON-DEVELOPMENTAL ITEM (NDI) HARDWARE EVALUATIONS - AGNS	
	<i>ACRN:</i>	AM	
	<i>NSN:</i>	N - Not Applicable	
	<i>Contract type:</i>	U - COST PLUS FIXED FEE	
	<i>Inspection:</i>	DESTINATION	
	<i>Acceptance:</i>	DESTINATION	
	<i>FOB:</i>	DESTINATION	
	<i>Descriptive Data:</i>	The contractor shall compare our next generation Antenna Wavefront Simulator prototype performance with the Advanced Global Navigation Simulator (AGNS) prototype performance in accordance with the Statement of Work for Delivery Order #4, dated 11 Sep 00.	

b. Section F - Deliveries or Performance is revised as follows:

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
0001		1	U			11 May 2004
	<i>Noun:</i>	RESEARCH AND DATA				
	<i>ACRN:</i>	9				
	<i>Descriptive Data:</i>	The scheduled delivery date for the approved final technical report is 11 May 2004. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11SEP00, Attachment 1 to this delivery order.				

ITEM	SUPPLIES SCHEDULE DATA	QTY	SHIP TO	MARK FOR	TRANS PRI	DATE
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0002AA		1	U			11 May 2004
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Noun:

OTHER - NON-DEVELOPMENT ITEM (NDI)
HARDWARE (C-17)
AB

ACRN:

Descriptive Data:

The scheduled delivery date for the approved final technical report is 11 May 2004. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11SEP00, Attachment 1 to this delivery order.

0002AB		1	U			11 May 2004
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Noun:

OTHER - NON-DEVELOPMENTAL ITEM (NDI)
HARDWARE EVALUATIONS - AGNS
AM

ACRN:

Descriptive Data:

The scheduled delivery date for the approved final technical report is 11 May 04. All data shall be delivered in accordance with the Statement of Work (SOW) dated 11 Sep 00, Attachment 1 to this delivery order.

c. Section G - Contract Administration/Payment Data is revised as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
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AB	ACRN Change	\$30,000.00
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57 03010 110 3620 11C17A 010100 00000 000000 503000 F03000

Total ACRN Amount: \$30,000.00

Funding breakdown: On CLIN 0002: -\$30,000.00
On CLIN 0002AA: +\$30,000.00

JON: 666A0200

Descriptive data:

JON:666A0200

CCC:6SAR00

COMPLETE

REF: DD Form 448 #NRYCF000072911, dated 15SEP00

F. Section J - List of Attachments and Exhibits is modified as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AJ	ACRN Change 57 23600 292 47WL 63665A 6SRW00 00000 63203F 503000 F03000 New ACRN Amount: \$392,843.00 Funding breakdown: On CLIN 000109: +\$50,000.00 PR/MIPR: GWSSN027200906 \$50,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 Reference: COMPLETE	+\$50,000.00
AM	ACRN Establish 57 23010 112 ETLA 190000 060110 00000 35164F 503000 F03000 New ACRN Amount: \$10,000.00 Funding breakdown: On CLIN 0002AB: +\$10,000.00 PR/MIPR: GWSSN027200490 \$10,000.00 JON: 666A0200 Descriptive data: RCCC: 6SRW00 MIPR NR# N000CZ02730117 dtd 11 Mar 02 PR COMPLETE	\$10,000.00

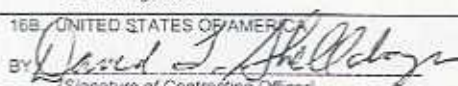
PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	\$10,000.00
AB	0002AA	\$30,000.00
AC	000101	\$20,000.00
AD	000103	\$30,000.00
AE	000104	\$22,000.00
AF	000105	\$175,000.00
AG	000106	\$170,000.00
AF	000107	\$ 60,000.00
AH	000108	\$ 4,282.00
AJ	000109	\$392,843.00
AK	000110	\$167,000.00
AL	000111	\$ 55,000.00
AM	0002AB	\$ 10,000.00

Total Obligated	\$1,146,125.00
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3. Except as noted above, all terms and conditions of subject delivery order remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 10		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil				DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004 10B. DATED (SEE ITEM 13) 08 NOV 2000			
TRW INC. ONE RANCHO CARMEL SAN DIEGO CA 92128 (858) 592-3314							
CODE 65409 FACILITY CODE							
MAILING DATE APR 30 2002							
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.							
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:							
(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
SUBJECT: INCREMENTAL FUNDING OBLIGATION CHANGE: \$251,500 (INCREASE) PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNRW, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381, COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: David.Shellabarger@wpafb.af.mil							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				DAVID L. SHELLABARGER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				BY 		30 Apr 02	
				(Signature of Contracting Officer)			

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$251,500.00, thereby making a revised amount allotted of \$1,086,125.00 which covers all contractual items through 16 SEP 2002. The dollar amount and time specified are in accordance with the contractors correspondence dated 26 APR 2002 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000109	CLIN Change Noun: ACRN:	Funding Info Only AJ	+\$29,500.00
000110	CLIN Establish Noun: ACRN:	Funding Info Only AK	+\$167,000.00
000111	CLIN Establish Noun: ACRN:	Funding Info Only AL	+\$55,000.00

Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AJ	ACRN Change 57 23600 292 47WL 63665A 6SRW00 00000 63203F 503000 F03000 New ACRN Amount: \$342,843.00 Funding breakdown: On CLIN 000109: +\$29,500.00 PRIMIPR: GWSSN027200511 \$29,500.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 Reference: COMPLETE	+\$29,500.00
AK	ACRN Establish 57 23600 292 47GB 696999 H26140 59700 000000 667100 F67100 New ACRN Amount: \$167,000.00 Funding breakdown: On CLIN 000110: +\$167,000.00 PRIMIPR: GWSSN027200589 \$167,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 MIPR #DD044853N2746S107 dtd 25 Mar 02 Reference: Complete	\$167,000.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

AMENDMENT/MODIFICATION NO.
09

ISSUED BY AFRL/SNKR

CODE

3. EFFECTIVE DATE

FA8650

4. REQUISITION/PURCHASE REQ. NO.
SEE SCHEDULE

1. CONTRACT ID CODE
U - CPFF

PAGE OF PAGES
1 of 2

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2310 EIGHTH STREET, BUILDING 167
WRIGHT-PATTERSON AFB OH 45433-7801
STEVEN L. WILLIS (937) 656-9837
Steven.Willis@wpafb.af.mil

DCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

5. PROJECT NO. (If applicable)
CODE S0514A

9. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)
TRW INC.
ONE RANCHO CARMEL
SAN DIEGO CA 92128
(858) 592-3314

MAILING DATE

MAR 04 2002

CODE 85409

FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.
F33615-97-D-1045 0004

10B. DATED (SEE ITEM 13)
08 NOV 2000

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS



The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers.



is extended,



is not extended

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
SEE SCHEDULE

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

X

- A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.
- B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
- C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
- D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING
PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNRW, (937) 255-4854 X4168
FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381
COLUMBUS OH 43218-2381 (CODE: HQ0339)
The Contracting Officer's email address is: David.Shellabarger@wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF SIGNER (Type or print)

DAVID L. SHELLABARGER
Contracting Officer

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

30-105

16B. UNITED STATES OF AMERICA

BY David L. Shellabarger
(Signature of Contracting Officer)

16C. DATE SIGNED

28 Feb-02

(Signature of person authorized to sign)

NSN 7540-01-152-8070

PREVIOUS EDITION UNUSABLE

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Created 27 Feb 2002 10:32 AM

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$27,000, thereby making a revised amount allotted of \$834,625.00 which covers all contractual items through 08 MAR 2002. The dollar amount and time specified are in accordance with the contractors correspondence dated 26 FEB 2002 incorporated herein by reference.
2. As a result of paragraph 1 above, the contract is specifically modified as follows:

Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AJ	ACRN Change 57 23600 292 47WL 63665A 6SRW00 00000 63203F 503000 F03000 New ACRN Amount: \$313,343.00 Funding breakdown: On CLIN 000109: +\$27,000.00 PRIMIPR: GWSSN027200320 \$27,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 Reference: COMPLETE	+ \$27,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00
AF	000105	175,000.00
AG	000106	170,000.00
AF	000107	60,000.00
AH	000108	4,282.00
AJ	000109	313,343.00
TOTAL OBLIGATED		834,625.00

3. Except as noted above, all terms and conditions of subject remain the same.

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$290,625.00, thereby making a revised amount allotted of \$807,625.00 which covers all contractual items through 15 FEB 2002. The dollar amount and time specified are in accordance with the contractors correspondence dated 20 NOV 2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000108	CLIN Establish Noun: ACRN: Descriptive Data: 000108 Section B: CLIN Establish	Funding Info Only AH +\$4,282.00	
000109	CLIN Establish Noun: ACRN: Descriptive Data: 000109 Section B: CLIN Establish	Funding Info Only AJ +\$286,343.00	

Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AH	ACRN Establish 97 X4930 NH2C 000 77777 0 068936 2F 000000 5301MAMD3050 New ACRN Amount: \$4,282.00 Funding breakdown: On CLIN 000108: +\$4,282.00 PR/MIPR: GWSSN027200100 \$4,282.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 Reference: REFERENCE MIPR #N6053001MPMD305, AMD 1 DATED 26SEP01, AND AMD 2 DATED 04 OCT 01. ACRN AH: ACRN Establish	\$4,282.00
AJ	ACRN Establish 57 23600 292 47WL 63665A 6SRW00 00000 63203F 503000 F03000 New ACRN Amount: \$286,343.00 Funding breakdown: On CLIN 000109: +\$286,343.00 PR/MIPR: GWSSN027200043 \$286,343.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SRW00 Reference: COMPLETE ACRN AJ: ACRN Establish	\$286,343.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00
AF	000105	175,000.00
AG	000106	170,000.00
AF	000107	60,000.00
AH	000108	4,282.00
AJ	000109	286,343.00

TOTAL OBLIGATED	807,625.00
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3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 2	
2. AMENDMENT/MODIFICATION NO. 07		3. EFFECTIVE DATE 01OCT02		4. REQUISITION/PURCHASE REQ NO. SEE SCHEDULE		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRU/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY				(X) MAILING DATE OCT 03 2001		9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
				X		10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004	
						10B. DATED (SEE ITEM 13) 08 NOV 2000	
CODE 65409		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) <input checked="" type="checkbox"/> A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. <input type="checkbox"/> B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). <input type="checkbox"/> C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <input type="checkbox"/> D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil							
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				BETTIE L. STEELY Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA BY <i>Bettie L. Steely</i> (Signature of Contracting Officer)		16C. DATE SIGNED 2 Oct 01	
(Signature of person authorized to sign)							

NSN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE
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 Created 02 Oct 2001 7:55 AM

STANDARD FORM 30 (REV.10-83)
 Prescribed by GSA
 FAR (48 CFR) 53.243

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$10,000.00, thereby making a revised amount allotted of \$517,000.00 which covers all contractual items through 27AUG2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 01OCT2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AF	ACRN Change 57 13600 291 47GB 696999 H26140 59700 000000 667100 F67100 New ACRN Amount: \$235,000.00 Funding breakdown: On CLIN 000107: +\$10,000.00 PRIMIPR: GWSSN017200725 \$10,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SAR00 Reference: DD Form 448 #DD0448531N746S234, AMD 1 dated 10 Jul 01, and AMD 2 dated 24 Aug 01.	+\$10,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00
AF	000105	175,000.00
AG	000106	170,000.00
AF	000107	60,000.00

TOTAL OBLIGATED	517,000.00
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3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF	PAGE OF PAGES 1 of 2
2. AMENDMENT/MODIFICATION NO. 06		3. EFFECTIVE DATE 01AUG30		4. REQUISITION/PURCHASE REQ. NO. SEE SCHEDULE	
5. ISSUED BY AFRL/SNKD CODE		6. ADMINISTERED BY (if other than Item 6) FA8650		7. PROJECT NO. (if applicable) S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil		DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY				9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004 10B. DATED (SEE ITEM 13) 08 NOV 2000	
CODE 65409		FACILITY CODE		11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS <input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.	
MAILING DATE AUG 30 2001					
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SCHEDULE					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X) <input checked="" type="checkbox"/> A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. <input type="checkbox"/> B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). <input type="checkbox"/> C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <input type="checkbox"/> D. OTHER (Specify type of modification and authority).					
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)		15A. NAME AND TITLE OF SIGNER (Type or print)			
		BETTIE L. STEELY Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		15C. DATE SIGNED	
(Signature of person authorized to sign)		BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)		30 Aug 01	

NSN 7540-01-152-8070

PREVIOUS EDITION UNUSABLE

ConWrite Version 4.1.4

Created 30 Aug 2001 9:02 AM

30-105

 STANDARD FORM 30 (REV. 10-83)
 Prescribed by GSA
 FAR (48 CFR) 53.243

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$10,000.00, thereby making a revised amount allotted of \$507,000.00 which covers all contractual items through 22 AUG 2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 14 AUG 2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AF	ACRN Change 57 13600 291 47GB 696999 H26140 59700 000000 667100 F67100 New ACRN Amount: \$225,000.00 Funding breakdown: On CLIN 000107: +\$10,000.00 PR/MIPR: GWSSN017200725 \$10,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SAR00 Reference: DD Form 448 #DD0448531N746S234 , AMD 1 dated 10 Jul 01.	+\$10,000.00

PAYMENT INSTRUCTIONS

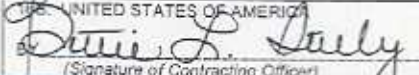
Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00
AF	000105	175,000.00
AG	000106	170,000.00
AF	000107	50,000.00

TOTAL OBLIGATED 507,000.00

NOTE: The above revised recap corrects an error which was made under the payment instructions on the previous modification, 000405.

3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 05		3. EFFECTIVE DATE 01 JUN 21		4. REQUISITION/PURCHASE REQ. NO. See Section G		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKO CODE		FA8650		7. ADMINISTERED BY (If other than item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY				MAILING DATE JUN 21 2001		(X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11)	
CODE 65409		FACILITY CODE 65409		X		10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004 10B. DATED (SEE ITEM 13) 08 NOV 2000	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Section G							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil							
Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				BETTIE L. STEELY Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		20 Jun 01	

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$50,000.00, thereby making a revised amount allotted of \$497,000.00 which covers all contractual items through 15 AUG 2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 14 MAY 2001 incorporated herein by reference. Note that the funds for this mod will be applied toward equipment and therefore the period of time covered by these funds is identical to the period of time covered by the funds in 000404.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:
 a. Section B - Supplies or Services is modified as indicated below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000107	CLIN Establish Noun: ACRN:	Funding Info Only AF	+\$50,000.00

- b. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AF	ACRN Change 57 13600 291 47GB 696999 H26140 59700 000000 667100 F67100 New ACRN Amount: \$215,000.00 Funding breakdown: On CLIN 000107: +\$50,000.00 PRIMIPR: GWSSN017200725 \$50,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SAR00 Reference: DD Form 448 #DD0448531N746S234 dated 07 MAY 2001	+\$50,000.00

PAYMENT INSTRUCTIONS

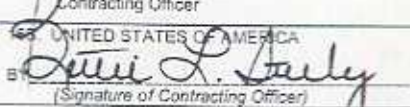
Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00

AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00
AF	000105	165,000.00
AG	000106	170,000.00
AH	000107	50,000.00

TOTAL OBLIGATED	497,000.00
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3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 04		3. EFFECTIVE DATE 01MAY16		4. REQUISITION/PURCHASE REQ NO. See Section G		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY				MAILING DATE MAY 16 2001		9A. AMENDMENT OF SOLICITATION NO.	
						9B. DATED (SEE ITEM 11)	
				X		10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004	
						10B. DATED (SEE ITEM 13) 08 NOV 2000	
CODE 65409		FACILITY CODE 65409					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Section G							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) <input checked="" type="checkbox"/> A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. <input type="checkbox"/> B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). <input type="checkbox"/> C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: <input type="checkbox"/> D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				BETTIE L. STEELY Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		15 May 01	

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$170,000.00, thereby making a revised amount allotted of \$447,000.00 which covers all contractual items through 15Aug2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 14May2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

a. Section B - Supplies or Services is modified as indicated below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000106	CLIN Establish Noun: ACRN:	Funding Info Only AG	+\$170,000.00

b. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AG	ACRN Establish 57 13600 291 47WL 63666A 6SAR00 00000 63253F 503000 F03000	\$170,000.00
	New ACRN Amount:	\$170,000.00
	Funding breakdown:	On CLIN 000106: +\$170,000.00
	PRIMIPR:	GWSSN017200643 \$170,000.00
	JON: 666A0200	
	Descriptive data: JON: 666A0200 CCC: 6SAR00 Reference: Complete	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00

AF	000105	165,000.00
AG	000106	170,000.00
TOTAL OBLIGATED		447,000.00

3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE	PAGE OF PAGES 1 of 3
2. AMENDMENT/MODIFICATION NO. 03		3. EFFECTIVE DATE 01APR23		4. REQUISITION/PURCHASE REQ. NO. See Section G	
5. PROJECT NO. (If applicable)					
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 5) CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steven.Willis@wpafb.af.mil		DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X)	
TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY				9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 C004 10B. DATED (SEE ITEM 13) 08 NOV 2000	
CODE 65409		FACILITY CODE 65409		MAILING DATE APR 24 2001	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Section G					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X)					
X A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.					
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).					
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			15A. NAME AND TITLE OF SIGNER (Type or print)		
			BETTIE L. STEELY Contracting Officer		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		15B. UNITED STATES OF AMERICA	
(Signature of person authorized to sign)				BY <i>Bettie L. Steely</i> (Signature of Contracting Officer)	
				16C. DATE SIGNED 23 Apr 01	

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$187,000.00, thereby making a revised amount allotted of \$277,000.00 which covers all contractual items through 01 JUL 2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 23 APR 2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

a. Section B - Supplies or Services is modified as indicated below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000104	CLIN Establish Noun: ACRN:	Funding Info Only AE	+ \$22,000.00
000105	CLIN Establish Noun: ACRN:	Funding Info Only AF	+ \$165,000.00

b. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AE	ACRN Establish 97 X4930 NH3P 000 77777 0 2F 8E0030 D01MP00301AA 066001 New ACRN Amount: \$22,000.00 Funding breakdown: On CLIN 000104: + \$22,000.00 PRIMIPR: GWSSN017200548 \$22,000.00 JON: 666A0200 Descriptive data: JON: 666A0200 CCC: 6SAR00 Reference: DD Form 448 #N6600101MP00301, dated 26Feb2001.	\$22,000.00

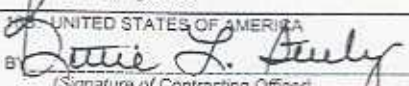
ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AF	ACRN Establish 57 13600 291 47GB 696999 H26140 59700 000000 667100 F67100	\$165,000.00
	<i>New ACRN Amount:</i> \$165,000.00	
	<i>Funding breakdown:</i> On CLIN 000105: +\$165,000.00	
	<i>PRIMIPR:</i> GWSSN017200589 \$165,000.00	
	JON: 666A0200	
	<i>Descriptive data:</i>	
	JON: 666A0200	
	CCC: 6SAR00	
	Reference: DD Form 448 #DD0448531N746S212 dated 30 MAR 2001	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
AE	000104	22,000.00
AF	000105	165,000.00
TOTAL OBLIGATED		277,000.00

3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES 1 of 3													
2. AMENDMENT/MODIFICATION NO. 02		3. EFFECTIVE DATE 01FEB06		4. REQUISITION/PURCHASE REQ. NO. See Section G		5. PROJECT NO. (If applicable)													
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A													
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241															
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY				MAILING DATE FEB 07 2001		9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11)													
				X		10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004													
						10B. DATED (SEE ITEM 13) 08 NOV 2000													
						CODE 65409 FACILITY CODE 65409													
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS:																			
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.																			
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Section G																			
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.																			
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%; text-align: center;">(X)</td> <td style="width:5%; text-align: center;">X</td> <td style="width:90%;">A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.</td> </tr> <tr> <td></td> <td></td> <td>B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).</td> </tr> <tr> <td></td> <td></td> <td>C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:</td> </tr> <tr> <td></td> <td></td> <td>D. OTHER (Specify type of modification and authority)</td> </tr> </table>								(X)	X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.			B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).			C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:			D. OTHER (Specify type of modification and authority)
(X)	X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.																	
		B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).																	
		C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:																	
		D. OTHER (Specify type of modification and authority)																	
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.																			
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil																			
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.																			
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)															
				BETTIE L. STEELY Contracting Officer															
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED													
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		6 Feb 01													

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$30,000.00, thereby making a revised amount allotted of \$90,000.00 which covers all contractual items through 30JUN2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 05FEB2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:
 a. Section B - Supplies or Services is modified as indicated below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000103	CLIN Establish Noun: ACRN:	Funding Info Only AD	+\$30,000.00

- b. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AD	ACRN Establish 97 X4930 NH3P 000 77777 0 066001 2F 8E0030 D01MP00182AA	\$30,000.00
	New ACRN Amount: \$30,000.00	
	Funding breakdown: On CLIN 000103: +\$30,000.00	
	PRIMIPR: GWSSN017200328 \$30,000.00	
	JON: 666A0200	
	Descriptive data: JON: 666A0200 CCC: 6SAR00 Reference DD FORM 448 #N6600101MP00182, dated 16JAN01.	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
AD	000103	30,000.00
TOTAL OBLIGATED		90,000.00

3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF	PAGE OF PAGES 1 of 3
2. AMENDMENT/MODIFICATION NO. 01		3. EFFECTIVE DATE 01 JAN 19		4. REQUISITION/PURCHASE REQ. NO. See Section G	
6. ISSUED BY AFRL/SNKD CODE		FA8650		5. PROJECT NO. (If applicable) S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil		DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0004 10B. DATED (SEE ITEM 13) 08 NOV 2000	
TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address CODE 65409 FACILITY CODE 65409				MAILING DATE JAN 19 2001	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required) See Section G					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF SIGNER (Type or print)		
			BETTIE L. STEELY Contracting Officer		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16C. DATE SIGNED	
(Signature of person authorized to sign)				UNITED STATES OF AMERICA Bettie L. Steely (Signature of Contracting Officer) 19 Jan 01	

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B by \$20,000.00, thereby making a revised amount allotted of \$60,000.00 which covers all contractual items through 30APR2001. The dollar amount and time specified are in accordance with the contractors correspondence dated 12JAN2001 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:
 a. Section B - Supplies or Services is modified as indicated below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000102	CLIN Establish Noun: ACRN: Descriptive Data: Funding Info Only	Funding Info Only AC	+\$20,000.00

b. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AC	ACRN Establish 97 X4930 NH3P 000 77777 0 2F 8E0030 D01MP00128AA 066001 New ACRN Amount: \$20,000.00 Funding breakdown: On CLIN 000102: +\$20,000.00 PR/MIPR: GWSSN017200238 \$20,000.00 JON: 666A0200 Descriptive data: CCC: 6SAR00 Reference: DD Form 448 #N6600101MP00128, dated 13DEC00.	\$20,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	10,000.00
AB	0002	30,000.00
AC	000102	20,000.00
TOTAL OBLIGATED		60,000.00

3. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1. PAGE 1 of 2																																																																																																																																																																																																
2. PROC INSTRUMENT ID NO. (PIN) F33615-97-D-1045		3. SPIN 000301	4. EFFECTIVE DATE MAIL DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	6. BDC/DMS RATING																																																																																																																																																																																																
7. ISSUED BY USAF/AFMC AFRL/SNKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252			8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SANTA ANA 34 CIVIC CENTER PLAZA P.O. BOX C-12700 SANTA ANA CA 92712-2700																																																																																																																																																																																																		
9. CONTRACTOR NAME AND ADDRESS TRW INC MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198-3499 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS		CODE FA8650	FACILITY CODE MAILING DATE JUN 22 1998		10. SECURITY CLASS U																																																																																																																																																																																																
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SUBJECT: ADMINISTRATIVE CHANGE IN CONTRACT ADMINISTRATION OFFICE PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P.O. 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339)																																																																																																																																																																																																					
18. <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE																																																																																																																																																																																																					
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)				22. UNITED STATES OF AMERICA (Signature of Contracting Officer)																																																																																																																																																																																																	
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20. NAME AND TITLE OF SIGNER (Type or print)		21. DATE SIGNED		23. NAME OF CONTRACTING OFFICER (Type or print)		24. DATE SIGNED																																																																																																																																																																																															
				BETTIE L. STEELY		19 Jun 98																																																																																																																																																																																															

A. The contract is hereby amended to change the contract administration office to the following:

Code: S0514A
DCMC San Diego
7675 Dagget St., Suite 200
San Diego CA 92111-2241

B. Except as noted above all terms and conditions of the contract remain unchanged.

ORDER FOR SUPPLIES OR SERVICES

1. PAGE 1 OF 4

2. PROC INSTRUMENT ID NO. (PIIN) F33615-97-D-1045 Mark all packages and papers with this number.		3. CALL ORDER NO. 0003	4. DATE OF ORDER * 7 MAY 98	5. REQUISITION / PURCHASE REQUEST PROJECT NO. GWLAA987201693	4. CERTIFIED FOR NATIONAL DEFENSE UNDER BDC REG 2 / DMS REG 1 RATING
7. ISSUED BY USAF/AFMC AFRL/SNKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: MARK J. NEHLS PHONE: (937) 255-5252			8. ADMINISTERED BY DCMC SANTA ANA 34 CIVIC CENTER PLAZA P.O. BOX C-12700 SANTA ANA CA 92712-2700		
9. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198-3499 PHONE: (619) 592-3641 COUNTY: SAN DIEGO			10. MAIL INVOICES TO		
11. DISCOUNT FOR PROMPT PAYMENT			12. PURCHASE OFFICE POINT OF CONTACT LMN/L11/LMN		
13. PAYMENT WILL BE MADE BY WEST ENTITLEMENT OPERATIONS P O BOX 182381 COLUMBUS OH 43218-2381			14. TYPE CONTRACTOR C		
15. SECURITY S			16. DATE OF DD 254 98FEB20		
17. (RESERVED)			18. SVC/AGENCY USE		
19. SURV CRIT C			20. TOTAL AMOUNT \$ 1,185,706.00		
21. APPROPRIATION AND ACCOUNTING DATA A. SCTY CLAS B. ACRN C. APPROPRIATION D. LIMIT SUBHEAD E. SUPPLEMENTAL ACCOUNTING CLASSIFICATION			22. DELIVERY B. NON-DDO CONTRACT NO. This delivery order is subject to instructions contained on this side of form only and is issued in accordance with and subject to terms and conditions of above numbered contract, or non-DDO Contract No.		
23. QUANTITY ORDERED HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS STATED			24. TOTAL DIFFERENCES		
25. DATE AND SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE			26. SHIP NO.		
27. I CERTIFY THIS AMOUNT IS CORRECT AND PROPER FOR PAYMENT			28. D.O. VOUCHER NO.		
29. SIGNATURE AND TITLE OF CERTIFYING OFFICER			30. PAID BY		
31. RECEIVED AT			32. AMOUNT VERIFIED CORRECT FOR		
33. RECEIVED BY			33. CHECK NUMBER		
34. DATE RECEIVED			34. BILL OF LADING NO.		
35. TOTAL CONTAINERS			35. S/R ACCOUNT NUMBER		
36. S/R VOUCHER NO.			36. S/R VOUCHER NO.		

A. Pursuant to Section B, paragraph 2 of the basic contract, the amount established for Delivery Order 0003 is \$1,185,706.00. The Basic contract is hereby amended to reflect the incorporation of Global Positioning System Modeling and Simulation Statement of Work, Attachment 1, dated 13 Feb 98.

Contract cost: \$1,121,464.00
Contract fee: \$ 64,242.00
Total CPFF: \$1,185,706.00

B. The amount allotted is \$1,185,706.00 which covers all contractual items under Delivery Order 0003 through Completion. This amount is in accordance with Contractor letter dated 98MAY07 incorporated herein by reference.

C. Section B - Supplies or Services is modified as follows:

Item No	Quantity	Pur Unit	Unit Price	Total Price
0001	1	LO	\$ 1,185,706.00	\$ 1,185,706.00

Noun: RESEARCH AND DATA

ACRN: 9 Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA987201693 Proj Mgr: LYDIA HARRIS
 Contract Type : U

Descriptive Data:

Conduct research in accordance with the Statement of Work entitled Global Positioning System Modeling and Simulation Statement of Work, Attachment 1 to this delivery order.

Item No	Quantity	Pur Unit	Unit Price	Total Price
0001014			\$	\$

Noun: AA FUNDING 1,181,706.00

ACRN: AA Sec Clas: NSN:
Site Codes PQA: ACP: FOB:
PR No: GWLAA987201693 Proj Mgr:
Contract Type :

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
0002	1	LO	\$ NSP	\$ NSP

Noun: SOFTWARE AND MANUALS

ACRN: AA Sec Clas: U NSN: N
 Site Codes: PQA: D ACP: D FOB: D
 PR No: GWLAA987201693 Proj Mgr:
 Contract Type :

Descriptive Date:

Deliver software and manuals in accordance with Global Positioning System Modeling and Simulation Statement of Work, Attachment 1.

D. Section F - Deliveries or Performance is modified as follows:

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0001	9	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	8MARO	1
B.		
C.		
D.		
E.		

Descriptive Data:

The scheduled delivery date for the approved final technical report is 8 MARO. All data shall be delivered in accordance with the attached Statement of Work.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0002	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	8MARO	1
B.		
C.		
D.		
E.		

Descriptive Data:

Deliver software and manuals in accordance with Global Positioning System Modeling and Simulation Statement of Work, Attachment 1.

E. Section G - Contract Administration Data is modified as follows:

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD Supplemental Accounting Classification	Obligation Amount
AA	ACCOUNT		
	UNCLAS	5783600	
		298 4730 673028 012340 00000 35164F 672300	\$ 1,185,706.00

pr/mipr data:
GWLAA987201693

Descriptive Data

JON: 666A0200

CCC: 656340

REFERENCE AF FM 616 #HO 0000G873018 9 dtd 17 Dec 97

Complete

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the delivery order and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	\$1,185,706.00

F. Pursuant to FAR 52.204-2, Security Requirements, DD Form 254 dated 20 Feb 98, is hereby incorporated as Attachment 2 hereto.

STATEMENT OF WORK
FOR
DELIVERY ORDER # 03

GLOBAL POSITIONING SYSTEM (GPS) MODELING & SIMULATION (GMAS)

1.0 OBJECTIVE

The objective of this effort is to refine Navwar requirements through an iterative process involving studies of top level system architectures, which could be developed in 1998-2000 and implemented in the 2001-2007 time frame. In addition, evaluations of the emerging GPS III Architecture Upgrade Program will identify and refine critical technologies and develop requirements for GPS through the year 2030.

2.0 REQUIREMENTS

The contractor shall plan, manage, and accomplish the tasks set forth below:

- 2.1 Contractor shall conduct trade studies and risk assessments, identify critical technologies, and assess Protection and Prevention architectural concepts compliant with requirements and employment plans.
- 2.2 Contractor shall provide support in the areas of threat assessments, scenario development, CONOPS development, selection of measures of merit, engagement, mission and campaign analysis, and cost analysis. Tasks shall include, but not be limited to: interfacing with the tri-service communities to insure accurate replication of User Equipment (UE) performance; and reviewing documentation provided by the Navwar Technical Assessment Panel to ensure the accurate characterization of alternative technical approaches to the Navwar problem.
- 2.3 Contractor shall define and quantify the key system performance parameters that significantly impact operational capability. Analyses shall be conducted to determine the design trade space and establish the sensitivity of the critical performance parameters to the analytic assumptions, so that a robust solution is obtained.
- 2.4 Contractor shall update and modify software tools, as required, throughout the duration of the program. Contractor shall test and deliver the GPS Interference and Navigation Tool (GIANT), Graphical User Interfaces (GUIs), and associated data bases and documentation. A plan shall be developed to integrate Navwar GPS jamming analysis tools with appropriate combat models to create a legacy operational analysis environment. Hardware and software approaches shall be evaluated to ensure continuous quality improvements in the Navwar modeling and simulation environment.

2.5 Contractor shall provide a list of any materials or hardware required to fulfill the terms of this DO.

2.6 Contractor shall conduct a technology demonstration of the GPS Interference and Navigation Tool. Technical Interchange Meetings (TIMs) and reviews shall be conducted at regular intervals.

3.0 DATA/DELIVERABLES

Deliverables for this effort shall consist of the following data items, as a minimum: presentation materials, conference agenda and minutes, status and financial reports, users' manuals, and a final report. Contractor may propose additional data requirements that are required to manage the effort. The delivery of GIANT, along with specific associated software and documentation, will be required. The DIDs for the Basic Contract (CDRLS A001 through A011) are acceptable for this DO.

4.0 SECURITY REQUIREMENTS

It is anticipated that this effort will generate and require access to classified information up to the TOP SECRET level. A modified DD254 is attached.

5.0 GOVERNMENT FURNISHED PROPERTY

No Government furnished property is anticipated for this delivery order.

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION <i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort)</i>				1. CLEARANCE AND SAFEGUARDING a. FACILITY CLEARANCE REQUIRED TOP SECRET b. LEVEL OF SAFEGUARDING REQUIRED SECRET	
2. THIS SPECIFICATION IS FOR: (X and complete as applicable)				3. THIS SPECIFICATION IS: (X and complete as applicable)	
a. PRIME CONTRACT NUMBER F33615-97-D-1045		Exp Date: 11 Nov 02		a. ORIGINAL (Complete date in all cases) Date (YYMMDD) 97 10 17	
b. SUBCONTRACT NUMBER		X b. REVISED (Supersedes all previous specs)		Revision No. 01 Date (YYMMDD) 98 01 09	
c. SOLICITATION OR OTHER NUMBER		DUE Date (YYMMDD)		c. FINAL (Complete Item 5 in all cases) Date (YYMMDD)	
4. IS THIS A FOLLOW-ON CONTRACT? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract					
5. IS THIS A FINAL DD FORM 254? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's requested dated _____, retention of the identified classified material is authorized for the period of _____					
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)					
a. NAME, ADDRESS, AND ZIP CODE TRW AVIONICS & SURVEILLANCE GROUP P.O. Box 289000 San Diego CA 92128-9000		b. CAGE CODE 65409		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) DIS/Director of Industrial Security 3605 Long Beach Blvd. Long Beach CA 90807-4013	
7. SUBCONTRACTOR					
a. NAME, ADDRESS, AND ZIP CODE NA		b. CAGE CODE NA		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) NA	
8. ACTUAL PERFORMANCE					
a. LOCATION TRW AVIONICS & SURVEILLANCE GROUP 4021 Executive Drive Beavercreek OH 45430		b. CAGE CODE 8T321		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) DIS/Director of Industrial Security 1040 Kings Highway North Cherry Hill NJ 08034-1992	
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT The Avionics CNI Concepts Exploration (ACE) technical effort will focus on the development and demonstration of technology to enable cost-effective evaluations/demonstrations of advanced avionics architectures; and define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems.					
10. THIS CONTRACT WILL REQUIRE ACCESS TO:					
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
b. RESTRICTED DATA		<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	
d. FORMERLY RESTRICTED DATA		<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	
e. INTELLIGENCE INFORMATION		<input type="checkbox"/>	<input type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	
(1) Service Compartmented Information (SCI)		<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. PERFORM SERVICES ONLY	
(2) Non-SCI		<input checked="" type="checkbox"/>	<input type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	
f. SPECIAL ACCESS INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	
g. NATO INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT	
h. FOREIGN GOVERNMENT INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS	
i. LIMITED DISSEMINATION INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	
j. FOR OFFICIAL USE ONLY INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COUNSEL SERVICE	
k. OTHER (Specify)		<input type="checkbox"/>	<input type="checkbox"/>	l. OTHER (Specify) Notification of government security activity is required.	
				YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	

12. PUBLIC RELEASE. Any information identified or unclassified pursuant to this contract shall not be released for public dissemination except as provided by the Intranet Security Manual or unless it has been approved for public release by appropriate Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify):

ASC/PA Bldg 14
1865 4th Street, Suite 15
WPAFB OH 45433-6503

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs) for review.
In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance need for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (If it is appropriate for the classified effort, attach, or forward under separate correspondence, any documents/guidelines/extracts reference herein. Add additional pages as needed to provide complete guidance.)

- a. Ref Blk 10a: COMSEC and/or cryptographic requirements apply. See DoD 5220.22-S for details.
- b. Ref 10e(1): SCI requirements apply. See addendum.
- c. Ref Blk 10e(2): General Intelligence Material/Foreign Disclosure applies. See addendum.
- d. Ref Blk 11c: Any classified information generated in the performance of this contract shall require the contractor to apply derivative classification and markings consistent with the source material.
- e. Ref Blk 11i: TEMPEST requirements apply. See addendum.
- f. Ref Blk 11k: DCS address is HQ Defense Courier System, Bldg P-830, Ft George G. Meade MD, 20755-5370.
- g. Ref Blk 11l: The Notification of Government Security Activity and Visitor Group Security Agreement clause applies. See contract clause in Section I for details.
- h. Program Manager: Lydia M. Harris, AFRL/SNAR, 255-4854 (ext 4186)

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use item 13 if additional space is needed.)

☒ Yes ☐ No

Ref Blk 10.e.(1) SCI requirements apply. See addendum.

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, identify specific areas or elements covered and the activity responsible for inspections. Use item 13 if additional space is needed.)

☒ Yes ☐ No

Contractor performance will occur at Wright-Patterson Air Force Base Ohio, with the exception of a small percentage of work which will be done at the contractor's facility. DIS is relieved of all inspection responsibility for contractor performance on the installation. ASC/SYSPC will maintain security oversight.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL
BETTIE STEELY

b. TITLE
CONTRACTING OFFICER

c. TELEPHONE (include Area Code)

(937) 255-5252

d. ADDRESS (include Zip Code)

WL/AAK
Bldg 7
Wright-Patterson AFB OH 45433

e. SIGNATURE

17. REQUIRED DISTRIBUTION

- ☒ a. CONTRACTOR
- ☐ b. SUBCONTRACTOR
- ☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
- ☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
- ☐ e. ADMINISTRATION CONTRACTING OFFICER
- ☒ f. OTHERS AS NECESSARY ASC/SYSPC

ADDENDUM TO DD FORM 254
25 February 1997**SENSITIVE COMPARTMENTED INFORMATION CLAUSES**
(SCIF NOT REQUIRED)

The following controls will apply to Sensitive Compartmented Information (SCI) provided under this contract:

1. Item 14: USAFINTEL 201-1, DOD TS-5105.21-M-1, DCID 1/14 and 1/21, and DIAM 50-5 provide the necessary guidance for EMSEC (emission security), physical, personnel and information security measures and is part of the SCI security specifications for the contract.
2. Item 15: This contract requires access to SCI. The National Air Intelligence Center (NAIC) Special Security Office (SSO) has exclusive security responsibility for all SCI released to the contractor or developed under this contract. The Defense Intelligence Agency (DIA), or its designee, shall be responsible for all inspections of the contractor to insure compliance with SCI Directives/Regulations. All SCI will be handled in accordance with security requirements furnished by the Aeronautical System Center (ASC) SSO, located in ASC/CVS.
3. SCI will not be released to contractor employees without the specific release approval by the originator of the material as outlined in the governing directives and based on prior approval and certification of "need to-know" by the contract monitor, Denise S. Jacobs, AFRL/SNAK, (937) 255-4854 x 4160.
4. Names of contractor personnel requiring access to SCI and justification for SCI billets will be submitted to the ASC SSO after contract monitor approval/concurrence. Upon receipt of written approval from the contract monitor, the Contractor Special Security Officer (CSSO) may submit the necessary forms to DISCO for a Single Scope Background Investigation (SSBI) for those personnel nominated for SCI access in accordance with the National Industrial Security Program Operating Manual (NISPOM).
5. Inquiries pertaining to classification guidance on SCI will be directed to the contract monitor listed in 3 above.
6. All SCI furnished to the contractor in support of this contract remains the property of the Department of Defense, or the agency or command that releases it. Upon completion or cancellation of the contract, SCI furnished will be returned to the NAIC SSO.
7. This contract requires that / SCI contract billets be established in order to fulfill the contractual obligations incurred. Access will be granted by the sponsoring government agency. Upon completion or cancellation of the contract, the CSSO will debrief all personnel not required for contract close-out and those billets will be disestablished.
8. Access will be granted only at the sponsoring agency and other accredited SCI Facilities (SCIF) as approved by the government Contract Monitor..

GENERAL INTELLIGENCE MATERIAL/FOREIGN DISCLOSURE

1. Special Requirements for General and Foreign Intelligence Material. In addition to the requirements and controls for classified material, the Director, Central Intelligence, sets up additional requirements and controls for intelligence in the possession of contractors. The contractor must:

a. Maintain control of all intelligence materials released in his or her custody in accordance with DOD 5220.22-M, the National Industrial Security Program Operating Manual (NISPOM), January 1995, paragraphs 5-200, 201 and 202 for control. Contractors agree that all intelligence material released, all reproductions and other material generated (including reproductions) are the property of the US Government.

b. Maintain control of all reproduced intelligence data in the same manner as the original.

c. Destroy intelligence materials in accordance with approved methods identified in the NISPOM.

d. Restrict access to those individuals with a valid need-to-know who are actually providing services under the contract. Further dissemination to other contractors, subcontractors, or other government agencies and private individuals or organization is prohibited unless authorized in writing by the Contracting Officer's Representative (COR) with prior approval of ASC/NAIC/POA.

e. Not release intelligence data to foreign nationals or immigrant aliens, regardless of their security clearance or contract status, without advance written permission from the COR, Foreign Disclosure Policy Office (ASC/SYSR), and ASC/NAIC/POA.

f. Ensure that each employee having access to intelligence material is fully aware of the special security requirements for this material.

2. Returning Intelligence to the Air Force. Contractors must return intelligence data to the COR at the termination or completion of a contract unless the COR has provided written approval for the contractor to retain for an additional two years. If retention is required beyond the two year period, the contractor must again request and receive written retention authority from the COR. If the COR grants retention authority, he or she must provide a copy of the written approval to ASC/NAIC/POA.

3. Release of Classified and Unclassified Information to Foreign Government and Their Representatives. Any military activity or defense contractor receiving a request from a foreign government or a representative thereof, for intelligence data about this program, shall forward the request to ASC/SYSR and ASC/NAIC/POA. Information released under Foreign Military Sales (FMS) must comply with the specific USAF disclosure guidance issued for the specific FMS customer.

21 August 1996

USE OF SPECIAL INTELLIGENCE MARKINGS1. Authorized Control Markings of Intelligence Information

- a. "Dissemination and Extraction of Information Controlled by Originator (ORCON)".

This marking is used only on classified intelligence that clearly identifies or would reasonably permit ready identification of intelligence sources or methods that are particularly susceptible to countermeasures that would nullify or measurably reduce their effectiveness. It is used to enable the originator to maintain continuing knowledge and supervision of the further use of intelligence beyond the original dissemination. This control marking may not be used when an item of information will reasonably be protected by use of any other markings specified herein, or by the application of the "need-to-know" principle and safeguarding procedures of the security classification system.

- b. "Not Releasable to Foreign Nationals (NOFORN)"

This control marking is used to identify classified intelligence material that may not be released in any form to foreign governments, foreign nationals, or non-US citizens without permission of the US Government originator, and then only when released in compliance with the National Disclosure Policy.

- c. "Authorized for Release to (Name of country(ies)/international organization"

This marking is used to identify classified intelligence material that the US Government Originator has predetermined to be releasable or has been released through established foreign disclosure channels to the indicated country(ies) or organization.

2. Procedures Governing Use of Control Markings

a. Any recipient desiring to use intelligence in a manner contrary to the restrictions established by the control markings set forth above, shall obtain the advanced permission of the originating agency. Such permission applies only to the specific purposes agreed to by the originator and does not automatically apply to all recipients. Originator will ensure that prompt consideration is given to recipients' requests, with particular attention to reviewing and editing if necessary, sanitized or paraphrased versions to derive a text suitable for release subject to lesser or no control markings.

b. The control markings authorized above shall be shown on the title page, front cover, and other applicable pages of documents, incorporated in the text of electrical communications, shown on graphics, and associated (in full or abbreviated form) with data stored or processed in automatic data processing systems. The control markings also shall be indicated by parenthetical use of the markings abbreviations at the beginning or end of the appropriate portions. If the control markings apply to several or all portions, the document may be marked with a statement to this effect rather than marking each portion individually.

c. The control markings in paragraph one (1) shall be individually assigned at the time of preparation of intelligence products and used in conjunction with security classifications and other markings specified by EO 12958 and its implementing ISOO Directive. The markings shall be carried forward to any new format in which the same information is incorporated including oral and visual presentations.

EMISSION SECURITY (EMSEC) REQUIREMENTS (FORMERLY TEMPEST REQUIREMENTS)

EMISSIONS SECURITY ASSESSMENT REQUEST (ESAR)

FOR ALL CLASSIFIED SYSTEMS

1. The contractor shall ensure that compromising emanations (EMSEC) conditions related to this contract are minimized.
2. The contractor shall provide countermeasure assessment data to the Contracting Officer (CO), in the form of an ESAR. The ESAR shall provide only specific responses to the data required in paragraph 3 below. The contractor's standard security plan shall NOT be used as a "stand-alone" ESAR response. The contractor shall NOT submit a detailed facility analysis/assessment. The ESAR information will be used to complete an EMSEC Countermeasures Assessment Review of the contractor's facility to be performed by the government EMSEC authority using current Air Force EMSEC directives. EMSEC is applied on a case-by-case basis and further information may be required to complete the review. The contractor shall provide this information to the CO when requested. After the evaluation of the ESAR by the government EMSEC authority, additional EMSEC requirements may be necessary. When changes to the information required in paragraph 3 below occurs (including, but not limited to, relocation, additions, or deletions of equipment from the original approved room), the contractors shall notify the CO of these changes. Upon request, the contractor shall submit to the CO a new ESAR, identifying the new configuration at least 30 days before the change occurs. The contractor shall NOT commence processing with the new configuration until receiving, as a minimum, interim approval from the CO.
3. *ESAR contents shall include, as a minimum, the following information:
 - a. The specific classification and special categories of material to be processed/handled by electronic means. Include percentage of each classification level used including unclassified (i.e., 5% Top Secret, 10% Secret/SAR, 25% Secret, 65% Unclassified).
 - b. The specific location (complete address, building/room number, or office) where classified processing will be performed. Include identification of any other contractor/company located within 200 meters of the facility.
 - c. Attach a copy of the Defense Investigative Service (DIS) Form 147 to validate physical security and approved storage level of the facility.
 - d. Provide the name, title, and telephone number (commercial and/or DSN) of a point of contact at the facility where processing will occur.
4. The prime contractor shall ensure that all subcontractors and/or vendors comply with EMSEC requirements when performing classified processing related to this contract. The subcontractor will provide the above documentation through their prime to the CO to complete the ESAR.

*NOTE: A copy of your Automated Information System Security Plan(s) (AISSP) will suffice.

EMISSION SECURITY (EMSEC) REQUIREMENTS
(FORMERLY TEMPEST REQUIREMENTS)

EMISSIONS SECURITY ASSESSMENT REQUEST (ESAR)

FOR TOP SECRET SYSTEMS

1. In addition to the information required for all classified systems, the following will be required for Top Secret processing:

a. Identify the radius (in meters) of the physical control space available around the system, equipment, or facility. Describe the barriers, doors, fences, walls, etc that define the area. Describe the control exercised over the area during duty and nonduty hours. Describe other factors which contribute to control (i.e., visitor procedures, escort requirements, searches of personnel and/or vehicles, etc).

b. Identify the type and location (relative to the classified system) of any unfiltered/telephone or communication lines, shielded or unshielded twisted pair cables or fiber, underground or unfiltered power lines, conduit, heating and air conditioning ducts, water pipes, etc, that transgress the established controlled area.

c. Describe the building in which the classified system(s) is housed, i.e., concrete block outer walls, 2" X 4" and single ply gypsum board inner walls, true floor to true ceiling walls, metallic (steel) or solid wood doors, windows (if there are windows, describe the type of coverings on them), etc.

d. Diagrams and/or drawings would be extremely helpful.

2. Additional information may be requested upon review of the documentation provided.

FOR OFFICIAL USE ONLY

The following procedures will be used to protect FOR OFFICIAL USE ONLY (FOUO) information.

1. **HANDLING:** Access to FOUO material shall be limited to those employees who need the material to do their jobs. The FOR OFFICIAL USE ONLY marking is assigned to information when created by a DOD User Agency. FOR OFFICIAL USE ONLY is not a classification, but requires extra precautions to ensure it is not released to the public.

2. **MARKING:**

a. Mark an unclassified document containing FOUO information "FOR OFFICIAL USE ONLY" at the bottom of each page containing FOUO information and on the bottom of the front page or front cover (if any) and on the back of the last page and on the back cover (if any).

b. In a classified document, mark:

- An individual paragraph that contains FOUO, but not classified information, by placing "(FOUO)" at the beginning of the paragraph.

- The top and bottom of each page that has both FOUO and classified information, with the highest security classification of the information on that page.

- "FOUO" at the bottom of each page that has FOUO but not classified.

- If a classified document also contains FOUO information or if the classified material become FOUO when declassified, place the following statement on the bottom of the cover or the first page, under the classification marking:
"NOTE: If declassified, review the document to make sure material is not FOUO and not exempt under AFI 37-131 before public release.

c. Mark other records, such as computer print outs, photographs, films, tapes, or slide "FOR OFFICIAL USE ONLY" so that the receiver or viewer knows the record contains FOUO information.

d. Mark each part of a message that contains FOUO information. Unclassified messages containing FOUO information must show the abbreviation "FOUO" before the text begins.

e. Make sure that documents that transmit FOUO materials call attention to any FOUO attachments.

f. Any FOUO material released to a contractor by a DOD User Agency must have the following statement on the front page or cover: THIS DOCUMENT CONTAINS INFORMATION EXEMPT FROM MANDATORY DISCLOSURE UNDER THE FREEDOM OF INFORMATION ACT. EXEMPTION(S) _____ APPLY.

3. **STORAGE:** To safeguard FOR OFFICIAL USE ONLY records during normal duty hours, place them in an out-of-sight location if your work area is accessible to persons who do not have a valid need for the information. After normal duty hours, store FOUO records to prevent unauthorized access. File them with other unclassified records in unlocked files or desks when internal building security is provided. When there is not internal security, locked buildings or rooms usually provide adequate after-hours protection. For additional protection, store FOUO material in locked containers such as file cabinets, desks, or bookcases. Expenditure of funds for security containers or closed areas solely for the protection of FOUO data is prohibited.

4. **TRANSMISSION:** FOUO material shall be transmitted by the same methods as other UNCLASSIFIED material. Discussion of FOUO material on the telephone is authorized if necessary for performance of the contract. FOUO information may be transmitted over telephone lines in digital form, by telecopies, or by other DSN teletype lines without encryption.

5. **RELEASE:** FOUO information shall not be released outside the contractor's facility except to representatives of the DOD.

6. **DESTRUCTION:** When no longer needed, FOUO information may be disposed of by a method which will preclude its disclosure to unauthorized individuals.

ORDER FOR SUPPLIES OR SERVICES

2. PROC INSTRUMENT ID NO. (PIIN) F33615-97-D-1045 Mark all packages and papers with this number.				3. CALL/ORDER NO. 0002	4. DATE OF ORDER * 98APR02	5. REQUISITION / PURCHASE REQUEST PROJECT NO. GWLAA987201570	1. PAGE OF 4	4. CERTIFIED FOR NATIONAL DEFENSE UNDER BDC REG 2 / DMS REG 1 RATING
7. ISSUED BY USAF/AEMC AFRL/SNKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: MARK J. NEHLS PHONE: (937) 255-5252				CODE FA8650		8. ADMINISTERED BY DCMC SAN DIEGO 7675 DAGGET ST STE 200 SAN DIEGO CA 92111-2241 CODE S0514A		
9. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92128-3499 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS				CODE 65409 FACILITY CODE MAILING DATE APR 10 1998		10. MAIL INVOICES TO 11. DISCOUNT FOR PROMPT PAYMENT NET 1 ST % DAYS DAYS 2 ND % DAYS IF "3" SEE SECT "E" 3 RD % DAYS		
12A. PURCHASE OFFICE POINT OF CONTACT LMN/L11/LMN				13. PAYMENT WILL BE MADE BY CODE HQ0339 IF "9" SEE SECT "K" WEST ENTITLEMENT OPERATIONS P O BOX 182381 COLUMBUS OH 43218-2381				
12B. RESERVED FOR SERVICE/AGENCY USE								
14. TYPE CONTRACTOR C	15. SECURITY A. CLAS U B. DATE OF DD 254							
19. CONTRACT ADMINISTRATION DATA A. FAST PAY 2 B. CONTRACT (1) KIND (2) TYPE U C. ABSTRACT RECIP ADP POINT U D. SPL CONT PROVISIONS U E. CONT ADMIN FUNC UNIT U			17. (RESERVED)		18. SVC/AGENCY USE		19. SURV CRIT C	20. TOTAL AMOUNT \$ 74,934.00
21. APPROPRIATION AND ACCOUNTING DATA a. SCTY CLAS C b. ACRN C c. APPROPRIATION U d. LIMIT SUBHEAD U e. SUPPLEMENTAL ACCOUNTING CLASSIFICATION								
F. CFN RECIPIENT DODAAD				G. OBLIGATION AMOUNT				
H. NON-CLIN/ELN PAYMENT PROV				I. SVC AGENCY USE				
22A. DELIVERY TYPE OF ORDER PURCHASE		B. NON-DOD CONTRACT NO. This delivery order is subject to instructions contained on this side of form only and is issued in accordance with and subject to terms and conditions of above numbered contract, or non-DOD Contract No. Reference your _____ Furnish the following on terms specified herein, including, for U.S. purchases, General Provisions of Purchase Order on DD Form 1155. (EXCEPT CLAUSE 13 APPLIES ONLY IF THIS BOX <input type="checkbox"/> IS CHECKED, AND NO. 15 IF THIS BOX <input type="checkbox"/> IS CHECKED): or as specified in the schedule it within the U.S., its possessions or Puerto Rico; if otherwise, under 2304(a)(5). <input type="checkbox"/> If checked, Additional General Provisions apply, supplier shall sign "Acceptance on DD Form 1155A and return _____ copies.						
*If quantity accepted by the Government is same as quantity ordered, indicated by X mark. If different enter actual quantity accepted below quantity order and encircle.		23. UNITED STATES OF AMERICA BETTIE L. STEELY BY: NAME OF CONTRACTING/ORDERING OFFICER AND DATE 980409 (YYMMDD)				24. TOTAL 25. DIFFERENCES		
25. QUANTITY ORDERED HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS STATED				26. SHIP NO. <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		27. D.O. VOUCHER NO.		29. INITIALS
DATE AND SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE				30. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		31. PAID BY		32. Amount Verified Correct For
35. I CERTIFY THIS AMOUNT IS CORRECT AND PROPER FOR PAYMENT						33. CHECK NUMBER		34. BILL OF LADING NO.
SIGNATURE AND TITLE OF CERTIFYING OFFICER						40. S/R ACCOUNT NUMBER		41. S/R VOUCHER NO.
36. RECEIVED AT	37. RECEIVED BY	38. DATE RECEIVED	39. TOTAL CONTAINERS	40. S/R ACCOUNT NUMBER		41. S/R VOUCHER NO.		

A. Pursuant to Section B, paragraph 2 of the basic contract, the amount established for Delivery Order 0002 is \$74,934.00. The Basic contract is hereby amended to reflect the incorporation of Assessment of Ionospheric Scintillation effects on Global Positioning System Performance Statement of Work, Attachment 1, dated 4 Feb 98.

Contract Cost:	\$70,038.00
Contract Fee:	\$4,896.00
Total CPFF:	\$74,934.00

B. The amount allotted is \$74,934.00 which covers all contractual items under Delivery Order 0002 through completion. This amount is in accordance with Contractor letter dated 98APR02 incorporated herein by reference.

C. Section B - Supplies or Services is modified as follows:

Item No	Quantity	Pur Unit	Unit Price	Total Price
0001	1	LO	\$ 74,934.00	\$ 74,934.00

Noun: RESEARCH AND DATA

ACRN: 9 Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA987201570 Proj Mgr: U
 Contract Type :

Descriptive Data:

Conduct Research and Data in accordance with the Statement of Work entitled, "Assessment of Ionospheric Scintillation effects on Global Positioning System Performance," shown at Attachment 1 to this Delivery Order.

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
000101			\$	\$

Noun: AA FUNDING \$74,934.00

ACRN: AA Sec Clas: NSN:
Site Codes PQA: ACP: FOB:
PR No: GWLAA987201570 Proj Mgr:
Contract Type :

Item No	Quantity	Pur Unit	Unit Price	Total Price
0002	1	LO	\$ NSP	\$ NSP

Noun: SOFTWARE

ACRN: 9 Sec Clas: U NSN: N
 Site Codes POA: D ACP: D FOB: D
 PR No: GWLAA987201570 Proj Mgr: U
 Contract Type :

Descriptive Data:

Provide software in accordance with Attachment 1, Statement of Work entitled "Assessment of Ionospheric Scintillation effects on Global Positioning System Performance" dated, 4 Feb 98.

D. Section F - Deliveries or Performance is modified as follows:

CLIN	ACRN	Sec Clas	Ship To	Mark For
0001	9	U	U	

	Delivery Date	Quantity
A.	2 MARO	1
B.		
C.		
D.		
E.		

Descriptive Data:

The scheduled delivery date for the approved final technical report is 2 MARO. All data shall be delivered in accordance with the attached Statement of Work dated 4 Feb 98.

CLIN	ACRN	Sec Clas	Ship To	Mark For
0002	U	U	U	

	Delivery Date	Quantity
A.	2 MARO	1
B.		
C.		
D.		
E.		

Descriptive Data:

Software will be delivered 2 Months MARO.

E. Section G - Contract Administration Data is modified as follows:

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD Supplemental Accounting Classification	Obligation Amount
AA	ACCOUNT		
	UNCLAS	SPECIAL	
		5783600 298 4719 592 674746 35917F 875800	\$ 74,934.00

pr/mipr data:
GWLAA987201570

Descriptive Data

JON: 666A0200
CCC: 656340

REFERENCE AF FM 616 #8927043, DTD 20JAN98
AF FM 616 FUND CITE: 5783600 298 4719 592 674746 35917F 875800

Complete

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	74,934.00

F. Section H - Special Contract Requirements.

In accordance with FAR clause 5352.245-9000, the Government will provide scintillation phenomenology data as Government Furnished Property for the duration of the period of performance for Delivery Order 0002. As a result of this action, FAR clause 52.245-5 applies.

STATEMENT OF WORK
FOR
DELIVERY ORDER # 02

4 Feb 98

ASSESSMENT OF IONOSPHERIC SCINTILLATION EFFECTS ON GLOBAL
POSITIONING SYSTEM (GPS) PERFORMANCE

1.0 OBJECTIVE

The objective of this effort is to perform modeling, simulation and analysis (MS&A) of ionospheric scintillation effects on existing and emerging (1998-2030) GPS technologies. The MS&A effort shall determine GPS measures of performance (MOPs) and measures of effectiveness (MOEs) in terms of mild, moderate, and severe ionospheric scintillation phenomena.

2.0 REQUIREMENTS

The contractor shall plan, manage, and accomplish the tasks set forth below:

- 2.1 Contractor shall define and quantify key ionospheric scintillation parameters that significantly impact GPS operational capability. Based on government-supplied scintillation phenomenology data, analyses shall be conducted to determine the design trade space and establish the sensitivity of the critical performance parameters to the analytic assumptions, so that a robust solution is obtained.
- 2.2 Contractor shall update and modify software tools, as required, throughout the duration of the program.
- 2.3 Contractor shall conduct up to six Technical Interchange Meetings (TIMs) and data reviews.

3.0 DATA/DELIVERABLES

Deliverables for this effort shall consist of the following data items, as a minimum: presentation materials, conference agenda and minutes, and MS&A results, as required. Contractor may propose additional data requirements that are required to manage the effort. The DIDs for the Basic Contract (CDRLS A001 through A011) are acceptable for this DO.

4.0 SECURITY REQUIREMENTS

It is anticipated that this effort will generate and require access to classified information up to the SECRET level.

5.0 GOVERNMENT FURNISHED PROPERTY

The Government will supply the contractor with the scintillation phenomenology data required for the performance of this Delivery Order (Ref Para 2.1).

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1.	
2. PROC INSTRUMENT ID NO. (PIN)		3. SPIN	4. EFFECTIVE DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	PAGE 1 of 2	
F33615-97-D-1045		000201	MAIL DATE		6. SOC/DMS RATING	
7. ISSUED BY:			8. ADMINISTERED BY (IF OTHER THAN BLOCK 7)			
USAF/AFMC/ASC WRIGHT LABORATORY AFRL/SNKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252			CODE FA8650 DCMC SAN DIEGO 7675 DAGGET ST STE 200 SAN DIEGO CA 92111-2241 PAS: NONE CODE S0514A			
9. CONTRACTOR NAME AND ADDRESS			10. SECURITY CLASS		11. DISCOUNT FOR PROMPT PAYMENT	
TRW INC AVIONICS SYSTEM DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS			CODE 65409 FACILITY CODE IF "P" FOR MULTIPLE FACILITIES SEE SECT "V"		U NET D A Y S 1 ST % DAYS 2 ND % DAYS 3 RD % DAYS OTHER IF "W" SEE SECT "E"	
			MAILING DATE JUL 09 1998		12. PURCHASE OFFICE POINT OF CONTACT	
					LSW/L11/LSW	
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS						
<input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17.						
The hour and date specified for receipt of Offers <input type="checkbox"/> is extended <input type="checkbox"/> is not extended						
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER if by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS						
<input type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER.						
<input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN.						
<input type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN.						
<input checked="" type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO FAR CLAUSE 52.249-14 ENTITLED 'EXCUSABLE DELAYS'						
15. CONTRACT ADMINISTRATION DATA						
A. KIND OF MOD	B. MOD ABBV RECIPIENT ADP PT	C. DATE OF SIGNATURE MODIFICATION	D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)	E. LOSING POICAO ON TRANSFER	F. GAINING POICAO ON TRANSFER	G. SVC/AGENCY USE
B						
16. ENTER ANY APPLICABLE CHANGES						
A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE
H. DATE SIGNED						
I. SECURITY (1) CLAS (2) DAT OF DD 254						
17. REMARKS (Except as provided herein, all terms and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect)						
SUBJECT: NO COST TIME EXTENSION PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339)						
18. CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT						
<input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE						
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)				22. UNITED STATES OF AMERICA (Signature of Contracting Officer)		
				BY <i>Bettie L. Steely</i>		
20. NAME AND TITLE OF SIGNER (Type or print)				23. NAME OF CONTRACTING OFFICER (Type or print)		24. DATE SIGNED
				BETTIE L. STEELY		8 Jul 98

1. Pursuant to FAR 52.249-14 entitled, "Excusable Delays", the above numbered Delivery Order is hereby amended to reflect a NO COST TIME EXTENSION.
2. As a result of Paragraph 1 above, said delivery order is specifically modified as set forth below.
3. Section F - Deliveries or Performance is hereby amended to reflect the new delivery date as follows:

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0001	9	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	98JUL24	1
B.		
C.		
D.		
E.		

DESCRIPTIVE DATA:

The scheduled delivery date for the approved Final Technical Report is 24Jul98. All data shall be delivered in accordance with the Statement of Work for DO#2 entitled, "Assessment Of Ionospheric Scintillation Effects On Global Positioning System (GPS) Performance", dated 4Feb98.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0002	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	98JUL24	1
B.		
C.		
D.		
E.		

DESCRIPTIVE DATA:

Software will be delivered on 24Jul98.

4. Except as noted above, all terms and conditions of the Basic Contract and Delivery Order #2 remain unchanged.

ORDER FOR SUPPLIES OR SERVICES										1. PA1E OF 6																												
2. PROC INSTRUMENT ID NO. (PIN) F33615-97-D-1045 <small>Mark all packages and papers with this number.</small>			3. CALL ORDER NO. 0001		4. DATE OF ORDER * MAIL DATE		5. REQUISITION / PURCHASE REQUEST PROJECT NO. GWLAA977201610		4. CERTIFIED FOR NATIONAL DEFENSE UNDER DO-A7 <small>BDC REG 2 / DMS REG 1 RATING</small>																													
7. ISSUED BY USAF/AFMC/ASC WRIGHT LABORATORY WL/AAKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STACEY A. SIEMER PHONE: (937) 255-2206					6. ADMINISTERED BY DCMC SAN DIEGO 7675 DAGGET ST., SUITE 200 SAN DIEGO, CA 92111-2241 PAS: NONE		CODE FA8650 CODE S0514A																															
9. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198 COUNTY: SAN DIEGO PHONE: (619) 592-3641 SEE SECTION G FOR PAYMENT ADDRESS					CODE 65409 FACILITY CODE MAILING DATE NOV 12 1997		10. MAIL INVOICES TO 11. DISCOUNT FOR PROMPT PAYMENT <table style="width:100%; border: none;"> <tr> <td></td> <td></td> <td></td> <td>NET</td> </tr> <tr> <td>1</td> <td>%</td> <td>DAYS</td> <td>DAYS</td> </tr> <tr> <td>ST</td> <td></td> <td></td> <td>OTHER</td> </tr> <tr> <td>2</td> <td>%</td> <td>DAYS</td> <td>IF "F" SEE SECT "E"</td> </tr> <tr> <td>ND</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>%</td> <td>DAYS</td> <td></td> </tr> <tr> <td>PD</td> <td></td> <td></td> <td></td> </tr> </table>							NET	1	%	DAYS	DAYS	ST			OTHER	2	%	DAYS	IF "F" SEE SECT "E"	ND				3	%	DAYS		PD			
			NET																																			
1	%	DAYS	DAYS																																			
ST			OTHER																																			
2	%	DAYS	IF "F" SEE SECT "E"																																			
ND																																						
3	%	DAYS																																				
PD																																						
12A. PURCHASE OFFICE POINT OF CONTACT LST/L11/LST					13. PAYMENT WILL BE MADE BY CODE SC1018 IF "Y" SEE SECT "K" DFAS-CO/SANTA ANA P.O. BOX 182381 COLUMBUS, OH 43218-2381 EFT: REQUIRED																																	
12B. RESERVED FOR SERVICE/AGENCY USE					14. TYPE CONTRACTOR C 15. SECURITY A. CLAS S B. DATE OF DD 254 10/17/97																																	
16. CONTRACT ADMINISTRATION DATA A. FAST PAY 2 B. CONTRACT (1) KIND (2) TYPE U C. ABSTRACT RECIP ADP POINT D. SPL CONT PROVISIONS E. CONT ADMIN FUNC LMT					17. (RESERVED)		18. SVC/AGENCY USE		19. SURV CRIT C		20. TOTAL AMOUNT 1,948,871 299,952.00																											
21. APPROPRIATION AND ACCOUNTING DATA A. SCTY CLAS B. ACRN C. APPROPRIATION D. LIMIT SUBHEAD E. SUPPLEMENTAL ACCOUNTING CLASSIFICATION					F. CPM RECIPIENT DODAAD G. OBLIGATION AMOUNT H. NON-CLIN/EIN PAYMENT PROV I. SVC AGENCY USE																																	
22A. TYPE OF ORDER DELIVERY PURCHASE		B. NON-DOD CONTRACT NO. This delivery order is subject to instructions contained on this side of form only and is issued in accordance with and subject to terms and conditions of above numbered contract, or non-DOD Contract No. Reference your _____ Furnish the following on terms specified herein, including, for U.S. purchases, General Provisions of Purchase Order on DD Form 1155 (EXCEPT CLAUSE 13 APPLIES ONLY IF THIS BOX <input type="checkbox"/> IS CHECKED, AND NO. 15 IF THIS BOX <input type="checkbox"/> IS CHECKED); special provisions _____ and delivery as indicated. This purchase is negotiated under the authority of 10 USC 2304(a)(1) or as specified in the schedule within the U.S., its possessions or Puerto Rico; if otherwise, under 2304(a)(6). <input type="checkbox"/> If checked, Additional General Provisions apply; supplier shall sign "Acceptance on DD Form 1155A and return _____ copies.																																				
*If quantity accepted by the Government, is same as quantity ordered, indicated by X mark. If different enter actual quantity accepted below quantity order and encircle.		23. UNITED STATES OF AMERICA BETTY L. STEELY BY: NAME OF CONTRACTING/ORDERING OFFICER AND DATE					971112 (YYMMDD)		24. TOTAL 25. DIFFERENCES																													
26. QUANTITY ORDERED HAS BEEN <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS STATED					27. SHIP NO. <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		28. D.O. VOUCHER NO.		29. INITIALS																													
DATE AND SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE					30. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		31. PAID BY		32. Amount Verified Correct For																													
35. I CERTIFY THIS AMOUNT IS CORRECT AND PROPER FOR PAYMENT SIGNATURE AND TITLE OF CERTIFYING OFFICER									33. CHECK NUMBER																													
36. RECEIVED AT		37. RECEIVED BY		38. DATE RECEIVED		39. TOTAL CONTAINERS		40. S/R ACCOUNT NUMBER		41. S/R VOUCHER NO.																												

A. Pursuant to Section B, paragraph 2 of the basic contract, the amount established for Delivery Order 0001 is as follows:

Contract Cost: \$ 280,380.00
Contract Fee : \$ 19,572.00
Total CPFF : \$ 299,952.00

B. The amount allotted is \$25,000.00 which covers all contractual items under Delivery Order 0001 through 30 days ARO. This amount is in accordance with Contractor letter dated 97 Oct 24, incorporated herein by reference.

C. Section B - Supplies or Services is modified as follows:

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
0001	1	LO	\$ 299,952.00	\$ 299,952.00

Noun: RESEARCH AND DATA

ACRN: 9 Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA977Z01610 Proj Mgr: U
Contract Type :

Conduct research in accordance with Statement of Work (SOW) entitled, "Communication, Navigation, Identification (CNI) Technology Research (CTR) included as Attachment 1 to this Delivery Order.

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
000101			\$	\$

Noun: FUNDING

ACRN: AA Sec Clas: NSN:
Site Codes PQA: ACP: FOB:
PR No: GWLAA977201610 Proj Mgr:
Contract Type :

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
0002	1	LO	\$ NSP	\$ NSP

Noun: HARDWARE

ACRN: U Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: GWLAA977201610 Proj Mgr: FY1456
 Contract Type :

DESCRIPTION

Deliver hardware in accordance with Attachment 1, Statement of Work (SOW) -
 Communication, Navigation, Identification (CNI) Technology Research (CTR)

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
0003	1	LO	\$ NSP	\$ NSP

Noun: SOFTWARE

ACRN: U Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: GWLAA977201610 Proj Mgr: GFY1175
 Contract Type :

DESCRIPTION

Deliver software in accordance with Attachment 1, Statement of Work (SOW) -
 Communication, Navigation, Identification (CNI) Technology Research (CTR)

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
0004	1	LO	\$ NSP	\$ NSP

Noun: NONDEVELOPMENTAL/MATERIALS

ACRN: U Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: GWLAA977201610 Proj Mgr: GFY1175
 Contract Type :

DESCRIPTION

Deliver nondevelopmental/material in accordance with Attachment 1, Statement of
 Work (SOW) - Communication, Navigation, Identification (CNI) Technology Research
 (CTR)

D. Section F - Deliveries or Performance is modified as follows:

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0001	9	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	12MARO	1
B.		
C.		
D.		
E.		

The scheduled delivery date for the approved final technical report is 12 MARO. All data shall be delivered in accordance with the Statement of Work (SOW), Attachment 1 to this delivery order. Technical effort must be completed 11 MARO.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0002	U	U	FY1456	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	12MARO	1
B.		
C.		
D.		
E.		

DESCRIPTIVE DATA

The scheduled delivery date for the hardware is 12 months after mailing date. All data shall be delivered in accordance with the Statement of Work (SOW), Attachment 1 to this delivery order, and Section H of the basic contract.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0003	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	12MARO	1
B.		
C.		
D.		
E.		

DESCRIPTIVE DATA

The scheduled delivery date for the software is 12 months after mailing date. All data shall be delivered in accordance with the Statement of Work (SOW), Attachment 1 to this delivery order.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0004	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	12MAR0	1
B.		
C.		
D.		
E.		

DESCRIPTIVE DATA

The scheduled delivery date for the nondevelopmental/materials is 12 months after mailing date. All data shall be delivered in accordance with the Statement of Work (SOW), Attachment 1 to this delivery order.

E. Section G - Contract Administration Data is modified as follows:

PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the contract and recapped below: Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	\$25,000.00

ACRN	Clas	Appropriation/Lmt	Subhead/CPN	Recip	DODAAD	Obligation
		<u>Supplemental Accounting Classification</u>				<u>Amount</u>
AA	ACCOUNT					
	UNCLAS	5773600			F03000	\$ 25,000.00
		297 47WL 63666A 656540 05000 63253F 503000				

pr/mipr data:
GWLAA977201610

Descriptive Data

JON: 666A0200
CCC: 656540

Complete

F. Section I - Contract Clauses are modified as follows:

Clause 5352.235-9001- Key Positions and Minimum Qualifications (AFMC) (JUL 1997) is amended as follows:

Key Position	Minimum Qualifications
(1) Software Engineer	9 years software engineering
(2) RF Engineer	17 years RF engineering
(3) Computer Systems Analyst	15 years computer systems analysis

STATEMENT OF WORK (SOW)
FOR
DELIVERY ORDER 01

COMMUNICATION, NAVIGATION, IDENTIFICATION (CNI)
TECHNOLOGY RESEARCH (CTR)

1.0 OBJECTIVES

The objective of this Delivery Order is to develop and demonstrate technologies in the Avionics CNI Exploration (ACE) Laboratory which are required to promote GPS research and evaluate CNI and advanced integration.

2.0 REQUIREMENTS

The contractor shall plan, manage, and accomplish the tasks set forth below:

2.1 Contractor shall develop test plans and procedures, perform assessments and conduct evaluations and demonstrations in the ACE facility.

2.2 Contractor shall develop and implement innovative approaches to modify, enhance, and maintain AWFS capabilities.

2.3 Contractor shall design, develop, integrate and test code as required for experiments in the facility using DEC's family of computers (VAXstations, Alphas, and single boards), Silicon Graphics workstations, and personal computers. Existing code shall be modified, where appropriate, to upgrade or enhance existing capabilities. System backups and upgrades will be kept current for all systems.

2.4 Contractor shall fabricate hardware, and calibrate unique and special purpose equipment, as required. Calibration of general purpose test equipment shall be kept on a calibration schedule using the Government's Precision Measurement Equipment Laboratory (PMEL).

2.5 Contractor shall enter associate agreements with Original Equipment Manufacturers (OEMs), subcontractors, and/or other specialists that are critical to satisfy requirements for providing specialized support and unique capabilities. Agreements that have been maintained in the past include those on the attached listing. In addition, contractor shall enter into non-disclosure agreements with other contractors, if required, for tasks under this DO.

2.6. Contractor shall provide materials, replacement components, and parts, as required to prevent or eliminate malfunctions, enhance or upgrade capabilities or improve performance requirements of laboratory hardware.

3.0 DATA/DELIVERABLES

Deliverables for this effort shall consist of the following data items, as a minimum: test plans, users manuals, status and financial reports, and a final report. Contractor may propose additional data requirements that are required to manage the effort. The following Data Item Descriptions (DIDs) are acceptable to this DO (CDRLs A001 through A011 under the Basic contract are also applicable to DO #1. See Exhibit A to Section J for DD Form 1423s):

DI-MISC-80711/T - SCIENTIFIC AND TECHNICAL REPORTS, Final Report, ONE/R

DI-MGMT-81468/T - CONTRACT FUNDS STATUS REPORT (CFSR), QRTLY

DI-MISC-80711/T - SCIENTIFIC AND TECHNICAL REPORTS, Contractor's Billing Voucher, MTHLY

DI-MGMT-80368/T - STATUS REPORT, Monthly Status Report, MTHLY

DI-ADMN-81373/T - PRESENTATION MATERIAL, ASREQ

DI-TMSS-80527 - COMMERCIAL OFF-THE-SHELF MANUALS, ASREQ

DI-IPSC-81443/T - SOFTWARE USER MANUAL (SUM), ASREQ

DI-ADMN-81250A/T - CONFERENCE MINUTES, ASREQ

DI-ADMN-81249A/T - CONFERENCE AGENDA, ASREQ

DI-FNCL-80331 - FUNDS AND MAN-HOUR EXPENDITURE REPORT, MTHLY

DI-NDTI-80566/T - TEST PLAN, ASREQ

4.0 SECURITY REQUIREMENTS

It is anticipated that the effort will generate and require access to classified information. (See Atch 2 to Section J).

5.0 GOVERNMENT FURNISHED PROPERTY

The list of equipment furnished by the Government is included in Atch 3 of anticipated Basic Contract.

ORIGINAL EQUIPMENT MANUFACTURER'S (OEMs)

As a minimum, the following maintenance areements are expected to be maintained under Delivery Order #1:

VENDOR	ITEM	ANNUAL COST (EST)
Northern Telecom	STR2760 GPS Simulator	\$35,000
Magnavox	GPS Simulator	\$20,000
Motorola	Single-board Computers	\$4,392
Cisco	Multi-NET	\$3,600
Systran	1553 Boards	\$1,200
Spire	Thruway Software	\$1,050
Silicon Graphics	Personal IRIS Hardware	\$840
Hummingbird	eXceed X-Terminal Software	\$700
Cim Solutions	CadKey (2)	\$325
APPROXIMATE TOTAL		\$67,807



DEPARTMENT OF THE AIR FORCE

AIR FORCE RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE OHIO 45433

MEMORANDUM FOR DCMA San Diego


Attn: William Johnson
7675 Dagget Street, Suite 200
San Diego, CA 92111-2241

09 AUG 2002

FROM: AFRL/SNKD
Building 167
2310 8th Street
Wright-Patterson AFB OH 45433-7801

SUBJECT: Current Status of Physically Completed Contract F33615-97-D-1045 0001

1. This delivery order has been physically completed. Request the cognizant Administrative Contracting Officer (ACO) immediately undertake the action necessary to closeout the subject delivery order. Should it not be possible to take this action immediately, it is requested that you please check the appropriate Closeout Delay Reason, give an "Estimated Close Date" and projected date for quick closeout LAW FAR 42.708 (see paragraph 4. below). A 1st Ind Form is provided to expedite your review.
2. Should the contract have an Unliquidated Obligation (ULO) amount, request you contact the point of contact below for concurrence/nonconcurrence to deobligate any ULO amount.
3. Often closeout is delayed pending settlement indirect costs. Should this be the case, you are hereby authorized to use Quick-Closeout procedures, as described at FAR 42.708, where such procedures are considered appropriate by the ACO.
4. Your cooperation in this matter is very much appreciated. Questions or concerns regarding the above should be addressed to the undersigned at (937) 255-4863. Telefax responses should be sent to AFRL/SNKD Attn: David Shellabarger at FAX # (937) 656-9074 or by email at david.shellabarger@wpafb.af.mil.
5. Request you provide this office an estimated date for contract closeout no later than 30 SEP 02.


DAVID L. SHELLABARGER
Contracting Officer

Attachment
1st Ind Form

1st Ind ()

Date: _____

TO: AFRL/SNKD
ATTN:
BLDG 167, 2310 8th ST
Wright-Patterson AFB, OH 45433-7801

Reference SNKD letter dated 8/9/02 The following information is provided regarding Contract
F33615-97-D-0045 with TRW

a. CODE CLOSEOUT DELAY REASON

___	A	Contractor has not submitted Final Invoice/Voucher
___	B	Final Acceptance not Required
___	C	Contractor has not submitted Patent/Royalty Report
___	D	Patent /Royalty Clearance Required
___	E	Contract has submitted Proposal for Final Price Redetermination
___	F	Supplemental Agreement covering Final Price Redetermination Required
___	G	Settlement of Subcontracts Pending
___	H	Final Audits in Process
___	J	Disallowed Cost Pending
___	K	Final Audit of Government Property Pending
___	L	Independent Research and Development Rates Pending
___	M	Negotiation of Overhead Rates Pending
___	N	Additional Funds Requested but not yet received
___	P	Reconciliation with Paying Office and Contractor being Accomplished
___	Q	Armed Services Board of Contracts Appeals Case
___	R	Public Law 85-804 Case
___	S	Litigation/Investigation Pending
___	T	Termination in Process
___	U	Warranty Clause Action Pending
___	V	Disposition of Government Property Pending
___	W	Contract Modification Pending (If so explain) _____

___	X	Contract Release and Assignment Pending
___	Y	Awaiting Notice of Final Payment
___	Z	Disposition of Classified Material Pending
___	6	Fee Withhold
___	7	Awaiting Removal of Excess Funds (\$ _____)

b. _____ Estimated Close Date

c. _____ If contract is closed,
date close-out action accomplished. Please forward DD1594 Contract Completion Statement or its
equivalent.

d. _____ ACO NAME: _____
(Signature) (Print/Stamp)

Telephone No. _____

MATERIAL INSPECTION AND RECEIVING REPORT

Form Approved
OMB No. 0704-0248

The public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0248), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ADDRESS.
SEND THIS FORM IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE DFARS, APPENDIX F-401.

1. PROCUREMENT INSTRUMENT IDENTIFICATION (CONTRACT) NO. F33615-97-D-1045		ORDER NO. 0001	6. INVOICE NO./DATE		7. PAGE OF 1 1	8. ACCEPTANCE POINT D
2. SHIPMENT NO. DAY0001Z	3. DATE SHIPPED 2002MAY23	4. B/L TCN	5. DISCOUNT TERMS			
9. PRIME CONTRACTOR CODE 65409 TRW SPACE & ELECTRONICS GROUP AVIONICS SYSTEMS GROUP ONE RANCHO CARMEL SAN DIEGO, CA 92128			10. ADMINISTERED BY CODE S0514A DCMA SAN DIEGO 34 CIVIC CENTER PLAZA P.O. BOX C-12700 SANTA ANNA, CA 92712-2700			
11. SHIPPED FROM (If other than 9) CODE 8T32 FOB: D TRW SPACE & ELECTRONICS GROUP DAYTON AVIONICS ENGINEERING CENTER 1900 FOUNDERS DRIVE KETTERING, OH 45420			12. PAYMENT WILL BE MADE BY CODE SC1006 DFAS COLUMBUS CENTER SANTA ANNA DIVISION P.O. BOX 182381 COLUMBUS, OH 43218-2311			
13. SHIPPED TO CODE FA8650 US Air Force AFRL/SNRW 2241 Avionics Circle WPAFB, OH 45433			14. MARKED FOR CODE			
15. ITEM NO. 0001	16. STOCK/PART NO. (Indicate number of shipping containers - type of container - container number.) CDRL A001 Final Report	17. QUANTITY SHIP/REC'D* 1		18. UNIT LO	19. UNIT PRICE	20. AMOUNT
21. CONTRACT QUALITY ASSURANCE a. ORIGIN <input type="checkbox"/> CQA <input type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents. DATE: _____ SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE: _____ TYPED NAME: _____ TITLE: _____ MAILING ADDRESS: _____ COMMERCIAL TELEPHONE NUMBER: _____			b. DESTINATION <input type="checkbox"/> CQA <input checked="" type="checkbox"/> ACCEPTANCE of listed items has been made by me or under my supervision and they conform to contract, except as noted herein or on supporting documents. DATE: 2 Aug 02 SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE: [Signature] TYPED NAME: Lydia Harris TITLE: Program Manager MAILING ADDRESS: AFRL/SNRW 2241 Avionics Circle WPAFB, OH 45433 COMMERCIAL TELEPHONE NUMBER: _____			
22. RECEIVER'S USE Quantities shown in column 17 were received in apparent good condition except as noted. DATE RECEIVED: _____ SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE: _____ TYPED NAME: _____ TITLE: _____ MAILING ADDRESS: _____ COMMERCIAL TELEPHONE NUMBER: _____ * If quantity received by the Government is the same as quantity shipped, indicate by (X) mark; if different, enter actual quantity received below quantity shipped and encircle.						
23. CONTRACTOR USE ONLY SN: 1A024						

02AUG08

** PMS CONTRACT CLOSEOUT DISPLAY **
THIS CONTRACT BELONGS TO AFRL

05:35

CONTRACT: F3361597D1045 CLOSEOUT-STATUS: P CATEGORY: C
BUYER: WILLIS STE SNKD 55311 TYPE-CONTRACT: CPFF
VALUE: \$9,630,000 ULO: \$0
DELAY:
ORIG RFP NUMBER:

DATE RECEIVED IN CLOSEOUT:
CURRENT BUYER'S CODE: LSW
CONTRACT EXPIRATION DATE:
FINAL DD250 DATE: 02AUG02
ACO'S ESTIMATED CLOSEOUT DATE:
ACO'S DELAY TO CLOSE REASON CODE:
ACO'S DELAY TO CLOSE REASON DATE:
ACO CLOSEOUT COMPLETED:
DD1594 SIGNED BY THE PCO:
RETIRED DATE:
RETIRED BOX NUMBER:
REMARKS:

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 3

2. AMENDMENT/MODIFICATION NO. 22	3. EFFECTIVE DATE 00DEC20	4. REQUISITION/PURCHASE REQ NO. See Section G	5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKD CODE	FA8650	7. ADMINISTERED BY (If other than Item 6) CODE	S0514A
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil		DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address CODE 65409	MAILING DATE DEC 20 2000	(X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0001 10B. DATED (SEE ITEM 13) 12 NOV 1997
FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment, (b) By acknowledging receipt of this amendment on each copy of the offer submitted, or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING
PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168
FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381
COLUMBUS OH 43218-2381 (CODE: HQ0339)
The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF SIGNER (Type or print) Contracting Officer		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)	16C. DATE SIGNED 19 Dec 00

(Signature of person authorized to sign)

9-01-152-8070

EDITION UNUSABLE
Version 3.95

30-105

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

1. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$283,000.00, thereby making a revised amount allotted of \$2,497,451.00 which covers all contractual items through 31AUG01. The dollar amount and time specified are in accordance with the contractors correspondence dated 13DEC00 incorporated herein by reference.

2. As a result of paragraph 1 above, the contract is specifically modified as follows:

a. Section B - Supplies or Services is modified as indicated below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000111	CLIN Change <i>Noun:</i> <i>ACRN:</i> <i>Descriptive Data:</i> Funding Info Only	Funding Info Only AL	+\$13,000.00
000115	CLIN Establish <i>Noun:</i> <i>ACRN:</i> <i>Descriptive Data:</i> Funding Info Only	Funding Info Only AQ	+\$270,000.00

b. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AL	ACRN Change 57 03600 290 3630 673028 056780 00000 35164F 672300 F72300 <i>New ACRN Amount:</i> \$113,000.00 <i>Funding breakdown:</i> On CLIN 000111: +\$13,000.00 <i>PR/MIPR:</i> GWSSN007205816 \$13,000.00 <i>JON:</i> 666A0200 <i>WBS:</i> <i>Descriptive data:</i> CCC: 6SAR00 REF: AF Form 616, Advice No. H00000G0730299, dated 12 JUL 2000.	+\$13,000.00

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AQ	ACRN Establish 57 13600 291 47WL 63666A 6SAR00 00000 63253F 503000 F03000	\$270,000.00
	New ACRN Amount:	\$270,000.00
	Funding breakdown:	On CLIN 000115: +\$270,000.00
	PR/MIPR:	GWSSN017200179 \$270,000.00
	JON: 666A0200	WBS:
	Descriptive data:	
	CCC: 6SAR00	
	Complete	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED	
AA	000101	64,600.00	
AB	000102	373,341.00	
AC	000103	14,000.00	
AD	000104	25,000.00	
AE	000105	14,294.00	
AF	000106	204,085.00	
AG	000107	40,000.00	
AH	000108	235,000.00	
AJ	000109	130,000.00	
AK	000110	297,131.00	
AL	000111	113,000.00	
AM	000112	75,000.00	NOTE: Funds to be expended by 30 Sep 00
AN	000113	250,000.00	
AP	000114	357,000.00	
AQ	000115	270,000.00	
TOTAL OBLIGATED		2,497,451.00	

3. Additionally, the previous modification (000121) included the wrong cost amount of \$513,735.00. The correct cost amount is \$515,144.00 corrected hereby.

4. Except as noted above, all terms and conditions of subject remain the same.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 4									
2. AMENDMENT/MODIFICATION NO. 21		3. EFFECTIVE DATE 000CT02		4. REQUISITION/PURCHASE REQ. NO. See Section G		5. PROJECT NO. (If applicable)									
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A									
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241											
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3541 SAN DIEGO, COUNTY See DD254 for Cleared Address CODE 65409 FACILITY CODE				MAILING DATE OCT 02 2000		9A. AMENDMENT OF SOLICITATION NO.									
						9B. DATED (SEE ITEM 11)									
				X		10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0001									
						10B. DATED (SEE ITEM 13) 12 NOV 1997									
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS <input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended. <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.															
12. ACCOUNTING AND APPROPRIATION DATA (if required) See Section G															
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.															
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">(X)</td> <td style="width:95%;">A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.</td> </tr> <tr> <td></td> <td>B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).</td> </tr> <tr> <td style="text-align: center;">X</td> <td>C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 52 243-2 Changes - Cost Reimbursement</td> </tr> <tr> <td></td> <td>D. OTHER (Specify type of modification and authority)</td> </tr> </table>								(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.		B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).	X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 52 243-2 Changes - Cost Reimbursement		D. OTHER (Specify type of modification and authority)
(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.														
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).														
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 52 243-2 Changes - Cost Reimbursement														
	D. OTHER (Specify type of modification and authority)														
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return 1 copies to the issuing office.															
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCORPORATION OF ADDITIONAL WORK PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-5854 EXT4186 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P.O. BOX 182381, COLUMBUS OH 43218-2381 (HQ0339)															
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.															
15A. NAME AND TITLE OF SIGNER (Type or print) Daniel B. McGuinness Contract Mgr.				16A. NAME AND TITLE OF SIGNER (Type or print) BETTIE L. STEELY Contracting Officer											
15B. CONTRACTOR/OFFEROR [Signature]		15C. DATE SIGNED Sept 28		16B. UNITED STATES OF AMERICA [Signature]		16C. DATE SIGNED 2 Oct 00									
(Signature of person authorized to sign)				(Signature of Contracting Officer)											

NSN 7540-01-152-6070

PREVIOUS EDITION UNUSABLE

ConWrite Version 3.85

36-105

 STANDARD FORM 30 (REV. 10-83)
 Prescribed by GSA
 FAR (48 CFR) 53.243

1. Pursuant to the "Changes" clause (FAR 52.243-02), the above numbered delivery order is hereby amended to reflect the incorporation of additional work within the scope of the contract, as defined in the modification to the Statement of Work, dated 11 SEPAUG 00, attached hereto for the following amount:

Cost: \$513,735.00
 Fee: \$35,926.00
 CPFF: \$551,070.00

2. As a result of paragraph 1 above, said delivery order is specifically modified as set forth below:

a. Section A - Cover Page

The total amount in Block 20 (cover page) is increased by \$551,070.00. As a result, the face value is increased by \$551,070.00, thereby making a new total contract price of \$2,499,941.00.

b. Section B - Supplies or Services is modified as follows:

(1) The additional amount allotted is \$357,000.00 which covers all contractual items under Delivery Order #1 through 10 JAN 2001, in accordance with the contractor's letter dated 14 SEP 2000 incorporated herein by reference. NOTE that the total amount allotted for Delivery Order #1 (and all modifications) is hereby currently \$2,214,451.00 (reference Section G herein).

(2) Line item 0001 is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
0001	CLIN Change		\$2,499,941.00
		LO	+\$551,070.00
	Noun:	RESEARCH AND DATA	
	Total Quantity:	1	
	New Total Item Amount:	\$2,499,941.00	
	ACRN:	9	
	Security:	U	
	NSN:	N - Not Applicable	
	Contract type:	U - COST PLUS FIXED FEE	
	Inspection:	DESTINATION	
	Acceptance:	DESTINATION	
	FOB:	DESTINATION	
	Descriptive Data:		

Conduct research and data in accordance with the Statement of Work (SOW) entitled "Communication, Navigation, Identification (CNI) Technology Research (CTR)" included in Delivery Order #1 as attachment #1, as modified by attachment #1 dated 11 SEP 2000, attached herein.

000114	CLIN Establish		
	Noun:	Funding Info Only	
	ACRN:	AP	+\$357,000.00

c. Section G - Contract Administration Data is modified as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AP	ACRN Establish 57 03600 290 47GB 696999 H26140 59700 000000 667100 F67100	\$357,000.00
	New ACRN Amount:	\$357,000.00
	Funding breakdown:	On CLIN 000114: +\$357,000.00
	PR/MIPR:	
	GWSSN007205876	\$292,000.00
	GWSSN007205879	\$30,000.00
	GWSSN007205872	\$35,000.00
	JON: 666a0200	WBS:
	Descriptive data:	
	JON: 66A0200	
	CCC: 6SAR00	
	Ref: DD Form 448 N46TG005300240, dated 22AUG00 for the \$292,000.00	
	Ref: DD Form 448 N46TG005300243, dated 22AUG00 for the \$35,000.00	
	Ref: DD Form 448 N46TG005300246, dated 23AUG00 for the \$30,000.00	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED	
AA	000101	64,600.00	
AB	000102	373,341.00	
AC	000103	14,000.00	
AD	000104	25,000.00	
AE	000105	14,294.00	
AF	000106	204,085.00	
AG	000107	40,000.00	
AH	000108	235,000.00	
AJ	000109	130,000.00	
AK	000110	297,131.00	
AL	000111	100,000.00	
AM	000112	110,000.00	
AN	000113	250,000.00	
AP	000114	357,000.00	
TOTAL OBLIGATED		2,214,451.00	NOTE: Funds to be expended by 30 Sep 00

3. This Supplemental Agreement constitutes full settlement of any claims of the Contractor under the contract, including the clause entitled "Changes", arising out of or by reason of the changes effected hereby.

11SEP2000

Modification #000121 to the Statement of Work
For F33615-97-D-1045, DO#1

1. A requirement exists in the Automatic Target Recognition (ATR) Technology Division (AFRL/SNA), Reference Systems Branch (AFRL/SNAR) to continue critical laboratory research and provide support to high visibility programs in the Advanced Concepts Exploration (ACE) facility. During the past two years, there has been a strong emphasis on GPS Modernization and the ACE Team has been in the forefront of research, development, and evaluations.
2. The contractor shall complete a battery of tests and evaluations in support of the GPS Antenna System (GAS) 1N program for the Navy.
3. The contractor shall purchase laboratory hardware and procure materials to fabricate and tests two antenna electronics test sets.
4. The contractor shall identify and correct any problems, anomalies, or other shortcomings in the current system that become apparent during testing.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 22. AMENDMENT/MODIFICATION NO.
203. EFFECTIVE DATE
00JUL244. REQUISITION/PURCHASE REQ.NO.
See Section G

5. PROJECT NO. (If applicable)

6. ISSUED BY AFRL/SNKD CODE

FA8650

7. ADMINISTERED BY (If other than Item 6)

CODE

SQ514A

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2310 EIGHTH STREET, BUILDING 167
WRIGHT-PATTERSON AFB OH 45433-7801
KEVIN G. DOUCET, 2D LT 937-656-9036
kevin.doucet@wpafb.af.mil

DCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

TRW INC.
AVIONICS SYSTEMS DIVISION
ONE RANCHO CARMEL M/S RC2/2639
SAN DIEGO CA 92128
(619) 592-3641 SAN DIEGO, COUNTY
See DD254 for Cleared Address

MAILING DATE

JUL 24 2000

CODE 65409

FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.

F33615-97-D-1045 0001

10B. DATED (SEE ITEM 13)

12 NOV 1997

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

X

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING

PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168

FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381

COLUMBUS OH 43218-2381 (CODE: HQ0339)

The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF SIGNER (Type or print)

BETTIE L. STEELY
Contracting Officer

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

(Signature of Contracting Officer)

4SN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE

DonWrite Version 3.61

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$35,000.00, thereby making a revised amount allotted of \$1,857,451.00 which covers all contractual items through 20 October 2000. The dollar amount and time specified are in accordance with the contractors letter dated 20 July 2000 incorporated herein by reference.

B. Section G - Contract Administration Data is modified as indicated below:

<u>ACRN</u>	<u>Appropriation/Lmt Subhead/Supplemental Accounting Data</u>	<u>Obligation Amount</u>
AM	ACRN Change 97 X4930 NH3P 000 77777 0 2F 8E0030 D00MP00253AA 066001	+\$35,000.00
	<i>New ACRN Amount:</i> \$110,000.00	
	<i>Funding breakdown:</i> On CLIN 000112: +\$35,000.00	
	<i>PR/MIPR:</i> GWSSN007205753 \$35,000.00	
	<i>Descriptive data:</i>	
	JON: 666A0200	
	CCC: 6SAR00	
	(Ref: DD FM 448 N6600100MP00253, AMEND 02, dtd 05 June 2000) for the \$35k.	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED	
AA	000101	64,600.00	
AB	000102	373,341.00	
AC	000103	14,000.00	
AD	000104	25,000.00	
AE	000105	14,294.00	
AF	000106	204,085.00	
AG	000107	40,000.00	
AH	000108	235,000.00	
AJ	000109	130,000.00	
AK	000110	297,131.00	
AL	000111	100,000.00	
AM	000112	110,000.00	
AN	000113	250,000.00	
TOTAL OBLIGATED		1,857,451.00	NOTE: Funds to be expended by 30 Sep 00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFF

PAGE OF PAGES
1 of 3

2. AMENDMENT/MODIFICATION NO. 19	3. EFFECTIVE DATE 00JUL10	4. REQUISITION/PURCHASE REQ. NO. See Section G	5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKD CODE	FA8650	7. ADMINISTERED BY (If other than Item 5)	CODE S0514A
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil		DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(X)	9A. AMENDMENT OF SOLICITATION NO.
TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address	MAILING DATE JUL 10 2000	9B. DATED (SEE ITEM 11)
CODE 65409 FACILITY CODE	X	10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0001
		10B. DATED (SEE ITEM 13) 12 NOV 1997

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING
 PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168
 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381
 COLUMBUS OH 43218-2381 (CODE: HQ0339)
 The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF SIGNER (Type or print)
	BETTIE L. STEELY Contracting Officer
15B. CONTRACTOR/OFFEROR	16B. UNITED STATES OF AMERICA
(Signature of person authorized to sign)	BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)
15C. DATE SIGNED	16C. DATE SIGNED
	10 Jul 00

NSN 7540-01-152-8070

PREVIOUS EDITION UNUSABLE

ConWrite Version 3.61

30-105

STANDARD FORM 30 (REV.10-83)
 Prescribed by GSA
 FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$50,000.00, thereby making a revised amount allotted of \$1,822,451.00 which covers all contractual items through 03 NOV 2000. The dollar amount and time specified are in accordance with the contractors letter dated 15 JUN 2000 incorporated herein by reference.

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000112	CLIN Change Noun: ACRN: Descriptive Data:	Funding Info Only AM	+\$50,000.00
Funding Info Only			

B. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AM	ACRN Change 97 X4930 NH3P 000 77777 0 2F 8E0030 D00MP00253AA 066001 New ACRN Amount: \$75,000.00 Funding breakdown: On CLIN 000112: +\$50,000.00 PR/MIPR: GWSSN007205741 \$50,000.00 Descriptive data: JON: 666A0200 CCC: 6SAR00 (Ref: DD FM 448 N6600100MP00253, dtd. 30 May 00) for the \$50k. ACRN AM Obligation Amount is increased by \$50,000.00 ACRN Description changed from JON: 666A0200 CCC: 6SAR00 (REF: DD FM 448 N6600100MP00253, DTD. 28 MAR 00) to JON: 666A0200 CCC: 6SAR00 (REF: DD FM 448 N6600100MP00253, DTD. 30 MAY 00) FOR THE \$50K. PR GWSSN007205741 added for \$50,000.00	+\$50,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	297,131.00
AL	000111	100,000.00
AM	000112	75,000.00
AN	000113	250,000.00
TOTAL OBLIGATED		1,822,451.00

NOTE: Funds to be expended by 30 Sep 00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 32. AMENDMENT/MODIFICATION NO.
183. EFFECTIVE DATE
00JUN074. REQUISITION/PURCHASE REQ.NO.
See Section G

5. PROJECT NO. (If applicable)

6. ISSUED BY AFRL/SNKD CODE

FA8650

7. ADMINISTERED BY (If other than Item 6)

CODE

S0514A

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2310 EIGHTH STREET, BUILDING 167
WRIGHT-PATTERSON AFB OH 45433-7801
KEVIN G. DOUCET, 2D LT 937-656-9036
kevin.doucet@wpafb.af.mil

DCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

TRW INC.
AVIONICS SYSTEMS DIVISION
ONE RANCHO CARMEL M/S RC2/2639
SAN DIEGO CA 92128
(619) 592-3641 SAN DIEGO, COUNTY
See DD254 for Cleared Address

MAILING DATE

JUN 07 2000

CODE 65409

FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X

10A. MODIFICATION OF CONTRACT/ORDER NO.

F33615-97-D-1045 0001

10B. DATED (SEE ITEM 13)

12 NOV 1997

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

X

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause); THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING

PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168

FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381

COLUMBUS OH 43218-2381 (CODE: HQ0339)

The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

5A. NAME AND TITLE OF SIGNER (Type or print)

15A. NAME AND TITLE OF SIGNER (Type or print)

BETTIE L. STEELY
Contracting Officer


5B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

15D. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY 
(Signature of Contracting Officer)

6 Jun 00

ISN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE

DonWrite Version 3.60

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$275,000.00, thereby making a revised amount allotted of \$1,772,451.00 which covers all contractual items through 27 October 2000. The dollar amount and time specified are in accordance with the contractors letter dated 30 May 2000 incorporated herein by reference.

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000112	CLIN Establish Noun: ACRN:	Funding Info Only AM	+\$25,000.00
000113	CLIN Establish Noun: ACRN:	Funding Info Only AN	+\$250,000.00

B. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AM	ACRN Establish 97 X4930 NH3P 000 77777 0 2F 8E0030 D00MP00253AA 066001 New ACRN Amount: \$25,000.00 Funding breakdown: On CLIN 000112: +\$25,000.00 PR/MIPR: GWSSN007205684 \$25,000.00 Descriptive data: JON: 666A0200 CCC: 6SAR00 (Ref: DD FM 448 N6600100MP00253, dtd. 28 Mar 00)	\$25,000.00
AN	ACRN Establish 57 03600 290 3630 673028 070000 00000 35164F 672300 F72300 New ACRN Amount: \$250,000.00 Funding breakdown: On CLIN 000113: +\$250,000.00 PR/MIPR: GWSSN007205513 \$250,000.00 Descriptive data: JON: 666A0200 CCC: 6SAR00 (Ref: AF FM 616 SH0000G0730227, dtd 17 Feb 00)	\$250,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	297,131.00
AL	000111	100,000.00
AM	000112	25,000.00
AN	000113	250,000.00

NOTE: Funds to be expended by 30 Sep 00

TOTAL OBLIGATED		1,772,451.00
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AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 22. AMENDMENT/MODIFICATION NO.
173. EFFECTIVE DATE
00APR134. REQUISITION/PURCHASE REQ. NO.
See Section G

5. PROJECT NO. (If applicable)

6. ISSUED BY AFRL/SNKD CODE

FA8650

7. ADMINISTERED BY (If other than Item 6)

CODE

S0514A

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2310 EIGHTH STREET, BUILDING 167
WRIGHT-PATTERSON AFB OH 45433-7801
STEVEN L. WILLIS (937) 656-9837
Steve.Willis@wpafb.af.mil

DCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

TRW INC.
AVIONICS SYSTEMS DIVISION
ONE RANCHO CARMEL M/S RC2/2639
SAN DIEGO CA 92128
(619) 592-3641 SAN DIEGO, COUNTY
See DD254 for Cleared Address

MAILING DATE

APR 13 2000

CODE 65409

FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

X

10A. MODIFICATION OF CONTRACT/ORDER NO.

F33615-97-D-1045 0001

10B. DATED (SEE ITEM 13)

12 NOV 1997

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

K

A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

4. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING

PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168

FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381

COLUMBUS OH 43218-2381 (CODE: HQ0339)

The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

5A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF SIGNER (Type or print)

BETTIE L. STEELY
Contracting Officer


5B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY 
(Signature of Contracting Officer)

13 Apr 00

ISN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE

DonWrite Version 3.51

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$50,000.00, thereby making a revised amount allotted of \$1,497,451.00 which covers all contractual items through 27 Oct 2000. The dollar amount and time specified are in accordance with the contractors letter dated 13 Apr 2000 incorporated herein by reference.

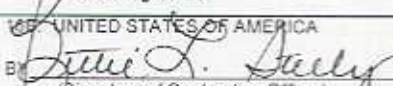
B. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AK	ACRN Change 57 03600 290 47WL 63666A 6SAR00 05000 63253F 503000 F03000	+\$50,000.00
	New ACRN Amount: \$297,131.00	
	Funding breakdown: On CLIN 000110: +\$50,000.00	
	PR/MIPR: GWSSN007205567 \$50,000.00	
	Descriptive data: JON:666A0200 CCC:6SAR00 Complete	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	297,131.00
AL	000111	100,000.00
TOTAL OBLIGATED		1,497,451.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. 16		3. EFFECTIVE DATE 00MAR29		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 656-9837 Steve.Willis@wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. AVIONICS SYSTEMS DIVISION ONE RANCHO CARMEL M/S RC2/2639 SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address CODE 65409 FACILITY CODE				MAILING DATE MAR 29 2000			
				(X) 9A. AMENDMENT OF SOLICITATION NO.			
				9B. DATED (SEE ITEM 11)			
				10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0001			
				10B. DATED (SEE ITEM 13) 12 NOV 1997			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:							
(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.							
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).							
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:							
D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				BETTIE L. STEELY Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		29 Mar 00	

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$100,000.00, thereby making a revised amount allotted of \$1,447,451.00 which covers all contractual items through 27 OCT 2000. The dollar amount and time specified are in accordance with the contractors letter dated 10 MAR 2000 incorporated herein by reference.

B. Section B - Supplies or Services is modified below:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000111	CLIN Establish <i>Noun:</i> <i>ACRN:</i> <i>Descriptive Data:</i> Funding Info Only	Funding Info Only AL	+\$100,000.00

C. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AL	ACRN Establish 57 03600 290 3630 673028 056780 00000 35164F 672300 F72300 <i>New ACRN Amount:</i> \$100,000.00 <i>Funding breakdown:</i> On CLIN 000111: +\$100,000.00 <i>PR/MIPR:</i> GWSSN007205485 \$100,000.00 <i>Descriptive data:</i> JON: 666A0200 CCC: 6SAR00 Ref. AF Form 616, Advice No. H00000G0730235, dated 29 FEB 2000. ACRN AL: ACRN Establish	\$100,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	247,131.00
AL	000111	100,000.00
TOTAL OBLIGATED		1,447,451.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFF

PAGE OF PAGES
1 of 2

2. AMENDMENT/MODIFICATION NO.
15

3. EFFECTIVE DATE
00FEB03

4. REQUISITION/PURCHASE REQ. NO.
See Section G

5. PROJECT NO. (If applicable)

6. ISSUED BY AFRL/SNKD CODE

FA8650

7. ADMINISTERED BY (If other than Item 6)

CODE

S0514A

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2310 EIGHTH STREET, BUILDING 167
WRIGHT-PATTERSON AFB OH 45433-7801
STEVEN L. WILLIS (937) 656-9837
Steve.Willis@wpafb.af.mil

DCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

TRW AVIONICS & SURVEILLANCE GROUP
MILITARY ELECTRONICS AND AVIONICS
ONE RANCHO CARMEL
SAN DIEGO CA 92128
(619) 592-3641 SAN DIEGO, COUNTY
See DD254 for Cleared Address

MAILING DATE

FEB 03 2000

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.
F33615-97-D-1045 0001

10B. DATED (SEE ITEM 13)

12 NOV 1997

CODE 65409

FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers

☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

X THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause)

A. THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING

PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168

FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381

COLUMBUS OH 43218-2381 (CODE: HQ0339)

The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF SIGNER (Type or print)

BETTIE L. STEELY
Contracting Officer

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY Bettie L. Steely
(Signature of Contracting Officer)

3 Feb 00

NSN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE

ConWrite Version 3.40

STANDARD FORM 30 (REV.10-83)

Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$127,131.00, thereby making a revised amount allotted of \$1,347,451.00 which covers all contractual items through 26 MAY 2000. The dollar amount and time specified are in accordance with the contractors letter dated 02 FEB 2000 incorporated herein by reference.

B. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AK	ACRN Change	+\$127,131.00
	57 03600 290 47WL 63666A 6SAR00 05000 63253F 503000 F03000	
	<i>New ACRN Amount:</i>	\$247,131.00
	<i>Funding breakdown:</i>	On CLIN 000110: +\$127,131.00
	<i>PR/MIPR:</i>	GWSSN007205316 \$127,131.00
	<i>Descriptive data:</i>	
	JON:666A0200	
	CCC:6SAR00	
	Complete	
	ACRN AK	
	Obligation Amount is increased by \$127,131.00	
	PR GWSSN007205316 added for \$127,131.00	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	247,131.00
TOTAL OBLIGATED		1,347,451.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 2

2. AMENDMENT/MODIFICATION NO. 14	3. EFFECTIVE DATE 1999DEC09	4. REQUISITION/PURCHASE REQ. NO. See Section G	5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKD CODE USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 STEVEN L. WILLIS (937) 255-5252 steve.willis@ws.wpafb.af.mil	FA8650	7. ADMINISTERED BY (If other than Item 6) DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241	CODE S0514A
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS ONE RANCHO CARMEL SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address CODE 65409		9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 0001 10B. DATED (SEE ITEM 13) 12 NOV 1997	

MAILING DATE

DEC 09 1999

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	
X	THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) A. THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING
PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168
FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381
COLUMBUS OH 43218-2381 (CODE: HQ0339)
The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	15A. NAME AND TITLE OF SIGNER (Type or print) BETTIE L. STEELY Contracting Officer		
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	15B. UNITED STATES OF AMERICA BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)	15C. DATE SIGNED 9 Dec 99

NSN 7540-01-152-8070
PREVIOUS EDITION UNUSABLE
ConWrite Version 3.40

30-105

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$60,000.00, thereby making a revised amount allotted of \$1,220,320.00 which covers all contractual items through 27 Mar 2000. The dollar amount and time specified are in accordance with the contractors letter dated 7 Dec 99 incorporated herein by reference.

B. Section G - Contract Administration Data is modified as indicated below:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AK	ACRN Change 57 03600 290 47WL 63666A 6SAR00 05000 63253F 503000 F03000	+\$60,000.00
	New ACRN Amount:	\$120,000.00
	Funding breakdown:	On CLIN 000110: +\$60,000.00
	PR/MIPR:	GWSSN007205094 \$60,000.00
	Descriptive data: JON:666A0200 CCC:6SAR00 Complete	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	120,000.00
TOTAL OBLIGATED		1,220,320.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 32. AMENDMENT/MODIFICATION NO.
F33615-97-D-1045 0001133. EFFECTIVE DATE
99OCT264. REQUISITION/PURCHASE REQ NO.
See Section G

5. PROJECT NO. (if applicable)

6. ISSUED BY AFRL/SNKD CODE

FA8650

7. ADMINISTERED BY (if other than item 6)

CODE

S0514A

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2310 EIGHTH STREET, BUILDING 167
WRIGHT-PATTERSON AFB OH 45433-7801
STEVEN L. WILLIS (937) 255-5252
steve.willis@ws.wpafb.af.milDCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

TRW AVIONICS & SURVEILLANCE GROUP
MILITARY ELECTRONICS AND AVIONICS
ONE RANCHO CARMEL
SAN DIEGO CA 92128
(619) 592-3641 SAN DIEGO, COUNTY
See DD254 for Cleared Address

MAILING DATE

OCT 26 1999

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.

SEE BLOCK 2

10B. DATED (SEE ITEM 13)

12 NOV 1997

CODE 65409

FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)

See Section G

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

X

THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause

A.) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING

PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168

FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381

COLUMBUS OH 43218-2381 (CODE: HQ0339)

The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF SIGNER (Type or print)

BETTIE L. STEELY

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY Bettie L. Steely

(Signature of Contracting Officer)

26 Oct 99

NSN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE

ConWrite Version 3.21

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$60,000.00, thereby making a revised amount allotted of \$1,160,320.00 which covers all contractual items through 14 Feb 2000. The dollar amount and time specified are in accordance with the contractors letter dated 19 Oct 99, incorporated herein by reference.

B. Section B - Supplies or Services is modified below.

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000110	CLIN Establish Noun: ACRN: Descriptive Data: Funding Info Only	Funding Info Only AK	+\$60,000.00

C. Section G - Contract Administration Data is modified below.

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AK	ACRN Establish 57 03600 290 47WL 63666A 6SAR00 05000 63253F 503000 F03000	\$60,000.00
	Funding breakdown: On CLIN 000110:	+\$60,000.00
	PR/MIPR: GWSSN007205053	\$60,000.00
	Descriptive data: JON:666A0200 CCC:6SAR00 Complete	

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
AK	000110	60,000.00
TOTAL OBLIGATED		1,160,320.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 32. AMENDMENT/MODIFICATION NO.
F33615-97-D-1045 0001123. EFFECTIVE DATE
99SEP284. REQUISITION/PURCHASE REQ.NO.
See Section G

5. PROJECT NO. (If applicable)

6. ISSUED BY AFRL/SNKO CODE

FA8650

7. ADMINISTERED BY (If other than item 6)

CODE

S0514A

USAF/AFMC
AIR FORCE RESEARCH LABORATORY
2530 C STREET, BUILDING 7
WRIGHT-PATTERSON AFB OH 45433-7607
STEVEN L WILLIS (937) 255-5252
steve.willis@ws.wpafb.af.milDCMC SAN DIEGO
7675 DAGGET STREET SUITE 200
SAN DIEGO CA 92111-2241

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

TRW AVIONICS & SURVEILLANCE GROUP
MILITARY ELECTRONICS AND AVIONICS
ONE RANCHO CARMEL
SAN DIEGO CA 92128
(619) 592-3641 SAN DIEGO, COUNTY
See DD254 for Cleared Address

MAILING DATE

SEP 28 1999

CODE 65409

FACILITY CODE

(X)

9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.
SEE BLOCK 2

10B. DATED (SEE ITEM 13)

12 NOV 1997

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Section G13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)

X THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause

A.) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: INCREMENTAL FUNDING
PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168
FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381
COLUMBUS OH 43218-2381 (CODE: HQ0339)
The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF SIGNER (Type or print)

BETTIE L. STEELY

15B. CONTRACTOR/OFFEROR

15C. DATE SIGNED

16B. UNITED STATES OF AMERICA

16C. DATE SIGNED

(Signature of person authorized to sign)

BY Bettie L. Steely
(Signature of Contracting Officer)

28 Sep 99

NSN 7540-01-152-8070

30-105

PREVIOUS EDITION UNUSABLE

ConWrite Version 3.21

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$20,000.00, thereby making a revised amount allotted of \$1,100,320.00 which covers all contractual items through 17Jan00. The dollar amount and time specified are in accordance with the contractors letter dated 27Sep99, incorporated herein by reference.

B. Section B - Supplies or Services is modified below.

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000109	CLIN Change Noun: ACRN:	Funding Info Only AJ	+\$20,000.00

C. Section G - Contract Administration Data is modified below.

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AJ	ACRN Change 57 93600 299 4730 673028 012340 00000 35164F 672300 F72300	+\$20,000.00

Funding breakdown: On CLIN 000109: +\$20,000.00

PR/MIPR: GWSSN997205944 \$20,000.00

Descriptive data:

JON:666A0200

CCC:6SAR00

Ref. AF Form 185, Project Order No. Q000CZ73900018, 08Jan99

ACRN AJ

Obligation Amount is increased by \$20,000.00

ACRN Description changed from

JON:666A0200CCC:6SAR00REF: AF FORM 616, ADVICE NO. H00000G9730299, CHANGE 01, DATED 11MAY99.ADDJON:666A0200CCC:6SAR00REF: AF FORM 616, ADVICE NO. H00000G9730336, DATED 03AUG99.

to

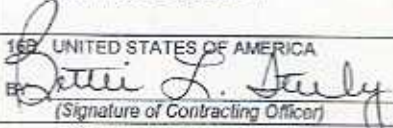
JON:666A0200CCC:6SAR00REF: AF FORM 185, PROJECT ORDER NO. Q000CZ73900018, 08JAN99,ADDJON:666A0200CCC:6SAR00REF: AF FORM 616, ADVICE NO. H00000G9730299, CHANGE 01, DATED 11MAY99.ADDJON:666A0200CCC:6SAR00REF: AF FORM 616, ADVICE NO. H00000G9730336, DATED 03AUG99.

PR GWSSN997205944 added for \$20,000.00

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	130,000.00
TOTAL OBLIGATED		1,100,320.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE See Block #2		PAGE OF PAGES 1 of 3	
2. AMENDMENT/MODIFICATION NO. F33615-97-D-1045 000111		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO. See Section G		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 5)		CODE S0514A	
USAFVAFMC AIR FORCE RESEARCH LABORATORY 2530 C STREET, BUILDING 7 WRIGHT-PATTERSON AFB OH 45433-7607 STEVEN L. WILLIS (937) 255-5252 steve.willis@ws.wpafb.af.mil				DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				MAILING DATE <div style="font-size: 1.5em;">AUG 18 1999</div>		9A. AMENDMENT OF SOLICITATION NO.	
TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS ONE RANCHO CARMEL SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY See DD254 for Cleared Address						9B. DATED (SEE ITEM 11)	
CODE 65409 FACILITY CODE						10A. MODIFICATION OF CONTRACT/ORDER NO. SEE BLOCK 2	
						10B. DATED (SEE ITEM 13) 12 NOV 1997	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
<input checked="" type="checkbox"/> THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause A.) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)							
SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339)							
The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				BETTIE L. STEELY			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
(Signature of person authorized to sign)				 (Signature of Contracting Officer)		18 Aug 99	
NSN 7540-01-152-8070		30-105		STANDARD FORM 30 (REV 10-83)			
PREVIOUS EDITION UNUSABLE				Prescribed by GSA			
ConWrite Version 3.11				FAR (48 CFR) 53.243			

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$50,000.00, thereby making a revised amount allotted of \$1,080,320.00 which covers all contractual items through 00JAN04. The dollar amount and time specified are in accordance with the contractors message dated 16Aug99, incorporated herein by reference.

B. Section B - Supplies or Services is modified below.

C. Section G - Contract Administration Data is modified below.

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	110,000.00
TOTAL OBLIGATED		1,080,320.00

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000109	CLIN Change Noun: ACRN: Descriptive Data: FUNDING INFO ONLY	Funding Info Only AJ	+\$50,000.00

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
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AJ	ACRN Change 57 93600 299 4730 673028 012340 00000 35164F 672300 F72300	+\$50,000.00
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Funding breakdown: On Clin 000109: +\$50,000.00

PR/MIPR: GWSSN997205810 \$50,000.00

Descriptive data:

JON:666A0200

CCC:6SAR00

Ref: AF Form 616, Advice No. H00000G9730299, Change 01, dated 11May99.
add

JON:666A0200

CCC:6SAR00

Ref: AF Form 616, Advice No. H00000G9730336, dated 03Aug99.

ACRN AJ

Obligation Amount is increased by \$50,000.00

ACRN Description changed from

JON:666A0200CCC:6SAR00REF: AF FORM 616, ADVICE NO. H00000G9730299,
CHANGE 01, DATED 11MAY99.

to

JON:666A0200CCC:6SAR00REF: AF FORM 616, ADVICE NO. H00000G9730299,
CHANGE 01, DATED 11MAY99.ADDJON:666A0200CCC:6SAR00REF: AF FORM 616,
ADVICE NO. H00000G9730336, DATED 03AUG99.
PR GWSSN997205810 added for \$50,000.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				CONTRACT ID CODE See Block #2	PAGE OF PAGES 1 of 2
2. AMENDMENT/MODIFICATION NO. F33615-97-D-1045 000110		3. EFFECTIVE DATE MAIL DATE FA8650	4. REQUISITION/PURCHASE REQ. NO. See Section G		5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKD CODE AFRL/SNKD USAF/AFMC AIR FORCE RESEARCH LABORATORY, BLDG 7 2530 C STREET WRIGHT-PATTERSON AFB OH 45433-7607 STEVEN L. WILLIS (937) 255-5252 STEVE.WILLIS@WS.WPAFB.AF.MIL		7. ADMINISTERED BY (If other than Item 6) CODE S0514A DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS ONE RANCHO CARMEL SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY			MAILING DATE JUN 18 1999		
CODE 65409		FACILITY CODE		<div style="display: flex; justify-content: space-between;"> <div> (X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. SEE BLOCK 2 10B. DATED (SEE ITEM 13) 12 NOV 1997 </div> <div style="text-align: center;"> X </div> </div>	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required) SEE SECTION G					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
<div style="display: flex;"> <div style="width: 30px; text-align: center;">(X)</div> <div> A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: D. OTHER (Specify type of modification and authority) </div> </div>					
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4168 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officer's email address is: Bettie.Steely@ws.wpafb.af.mil					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			15A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
15B. CONTRACTOR/OFFEROR			15B. UNITED STATES OF AMERICA		15C. DATE SIGNED
(Signature of person authorized to sign)			BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)		18 Jun 99
15C. DATE SIGNED			15C. DATE SIGNED		
30-105			STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243		

SCHEDULE OF CHANGES

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$60,000.00, thereby making a revised amount allotted of \$1,030,320.00 which covers all contractual items through 99Nov30. The dollar amount and time specified are in accordance with the contractors message dated 10Jun99, incorporated herein by reference.

B. Section B - Supplies or Services is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000109			
	FUNDING INFO ONLY		
	acrn: AJ		+\$60,000.00

C. Section G - Contract Administration Data is modified as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AJ		\$60,000.00
57	93600 299 4730 673028 012340 00000 35164F 672300 F72300	
	funding breakdown: On Clin 000109:	+\$60,000.00
	pr/mipr: GWSSN997205691	\$60,000.00
	descriptive data:	
	JON:666A20200	
	CCC:6SAR00	

Reference: AF Form 616, Advice No. H00000G9730299, change 01, dated 11May99.

ACRN AJ: ACRN Establish

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
AJ	000109	60,000.00
TOTAL OBLIGATED		1,030,320.00

99JUN15

** PMS DD350 DATA FOR F3361597D1045000110 (3D) **
(1 OF 1)

10:11

PART A:

A1-TYP-RPT: 0 A2-RPT-NR: A3-OFC-CD: GR09 A4-OFC-NM: AFRL/SNKD

PART B:

B1A-CONTRACT: F3361597D1045	B1B-ORIGIN: A	B2-MOD: 000110
B3-ACTION-DT:	B4-COMPL-DT: 2002NOV11	
B5A-KTR-ID-NR: 121713036	B5B-GOVT-AGENCY: N	
B5C-CAGE-CD: 65409	B5D-KTR-NM: TRW, INC	
B5E-KTR-STR: ONE RANCHO CARMEL	B5E-KTR-CITY: SAN DIEGO	
B5E-KTR-STATE: CA	B5E-KTR-ZIP-CD: 92128	
B5F-TIN: 340575430	B5G-PARENT-TIN:	
B5H-PARENT-NM:		
B6A-CITY-CD: 66000	B6B-ST-CTRY-CD: 06	
B6C-CITY: SAN DIEGO	B6C-STATE-CTRY: CALIFORNIA	
B7-TYPE-OBL: 1	B8-OBLIGATION: \$60,000	
B9-FMS: N	B10-MULTI-YR: N	
B11-MULTI-YR-VL: \$0	B12A-FSC-SVC-CD: AC63	
B12B-DOD-CLAIM: A70	B12C-SYS-EQUIP-CD: 000	B12D-SIC-CD: 8731
B12E-DESC: AVIONICS CNI EXPLORATION		
B13A-CONT-ORDER: 5	B13B-TYPE-IDC: B	B13C-MS-AWD-IDC: M
B14-CICA: B		B13D-MOD: C

PART C:

C1-SYNOPSIS: A	C2-REASON-NOT-SYNOP:	C3-EXTENT-COMPETED: A
C4-SEA-TRANSPORT: N	C5-TYPE-CONTRACT: U	C6-NR-OFFERORS-SOL: 2
C7-NR-OFFER-RCVD: 003	C8-SOL-PROCEDURES: B	C9-AUTHORITY:
C10-LABOR-STATUTE: Z	C11-COST-PRICING-CERT: N	C12-FINANCING: Z
C13A-PLACE-MANUF:	C13B-CTRY-ORIGIN-CD:	C14-COMMERCIAL-ITEMS: N

PART D:

D1-TYPE-BUSINESS: C	D2-RSN-NOT-AWDED-SDB: A	D3-RSN-NOT-AWDED-SB: C
D4A-TYPE-SB-SA: A	D4B-TYPE-SDB-SA: A	D4C-HBCU-MI-SA: A
D4E-PREMIUM-PCT:	D5-ETHNIC-GROUP:	D6-WOMEN-OWNED: N
D7-SBIR-PROGRAM: A	D8-SUBCONTRACT-PLAN: D	D9-DEMO-TEST-PROG: N
D10-SIZE-SB:	D11-EMERGING-SB:	

PART E:

E4-CONTINGENCY:

PART F:

F1-NAME: STEELY BET

F3-PHONE: 52206

F4-DATE: 1999JUN15

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE See Block #2	PAGE OF PAGES 1 of 2
2. AMENDMENT/MODIFICATION NO. F33615-97-D-1045 000109		3. EFFECTIVE DATE FA8650	4. REQUISITION/PURCHASE REQ.NO. See Section G		5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKD CODE AFRL/SNKD USAF/AFMC AIR FORCE RESEARCH LABORATORY 2530 C STREET BLDG 7 WRIGHT-PATTERSON AFB OH 45433-7607 STEVEN L. WILLIS (937) 255-5252 STEVE.WILLIS@WS.WPAFB.AF.MIL		7. ADMINISTERED BY (If other than Item 6) DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241		CODE	S0514A
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY			MAILING DATE MAY 19 1999	9A. AMENDMENT OF SOLICITATION NO.	
CODE 65409 FACILITY CODE			X	9B. DATED (SEE ITEM 11)	
				10A. MODIFICATION OF CONTRACT/ORDER NO. SEE BLOCK 2	
				10B. DATED (SEE ITEM 13) 12 NOV 1997	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: ("LIMITATION OF FUNDS CLAUSE") THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.				
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).				
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
	D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 X4186 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officers e-mail address is: BETTIE.STEELY@WS.WPAFB.AF.MIL					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
			BETTIE L. STEELY		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA	
(Signature of person authorized to sign)				BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)	
NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE ConWrite Version 3.00		30-105		16C. DATE SIGNED 18 May 99	

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, Paragraph 2 by \$235,000.00, thereby making a revised amount allotted of \$970,320.00 which covers all contractual items through 1 Oct 99. The dollar amount and time specified are in accordance with the contractors letter dated 12 May 99, incorporated herein by reference.

B. Section B - Supplies or Services is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000108			
	FUNDING INFO ONLY		
	acrn: AH		+\$235,000.00

C. Section G - Contract Administration Data is modified as follows:

ACRN	Appropriation/Lmt Subhead/Supplemental Accounting Data	Obligation Amount
AH		\$235,000.00
	57 93600 299 47GB 696999 H26142 59200 000000 875800 ASZN00	
	funding breakdown: On Clin 000108:	+\$235,000.00
	pr/mipr: GWSSN997205638	\$235,000.00
	descriptive data:	
	JON: 666A0200	
	CCC: 6SAR00	
	REF: DD Form 448s, #N46TG995300154/N46TG995300155 dated 28 Apr 99	
	The fund cite appears as follows on the DD Form 448s: 5793600 299 47GB 696999	
	H26142 592 000000 875800 ASZN0029 OAL1 and 5793600 299 47GB 696999 H26142 592	
	000000 875800 ASZN0029 OAL2	

ACRN AH: ACRN Establish

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	40,000.00
AH	000108	235,000.00
TOTAL OBLIGATED		970,320.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE See Block #2	PAGE OF PAGES 1 of 2
2. AMENDMENT/MODIFICATION NO. F33615-97-D-1045 000108		3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO. See Section G		5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKD CODE USAF\AFMC AIR FORCE RESEARCH LABORATORY BUILDING 7, 2530 C STREET WRIGHT-PATTERSON AFB OH 45433-7607 BETTIE L. STEELY (937) 255-5252		FA8650	7. ADMINISTERED BY (If other than Item 6) DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241		CODE S0514A
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO CA 92128 (619) 592-3641 SAN DIEGO, COUNTY			MAILING DATE APR 20 1999	9A. AMENDMENT OF SOLICITATION NO.	
CODE 65409 FACILITY CODE			X	9B. DATED (SEE ITEM 11)	
				10A. MODIFICATION OF CONTRACT/ORDER NO. SEE BLOCK 2	
				10B. DATED (SEE ITEM 13) 12 NOV 1997	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.				
X	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).				
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
	D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 x4186 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 18231 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officers e-mail address is: BETTIE.STEELY@WS.WPAFB.AF.MIL					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
			BETTIE L. STEELY		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
(Signature of person authorized to sign)			Bettie L. Steely (Signature of Contracting Officer)		20 Apr 99
NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE ConWrite Version 2.81		30-105		STANDARD FORM 30 (REV.10-83) Prescribed by GSA FAR (48 CFR) 53.243	

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, Paragraph 2 by \$10,000.00, thereby making a revised amount allotted of \$735,320.00 which covers all contractual items through 15 Jul 99. The dollar amount and time specified are in accordance with the contractors message dated 19 Apr 99, incorporated herein by reference.

B. Section B - Supplies is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
000107	FUNDING INFO ONLY		
	Acn: AG		+\$10,000.00

C. Section G - Contract Administration Data is modified as follows:

ACRN	Appropriation/Lmt	Subhead/Supplemental	Accounting Data	Obligation Amount
AG	57 93600	299 4730 673028 056780 00000 35164F 672300 F72300		+\$10,000.00
	funding breakdown:	On Clin 000107:		+\$10,000.00
	pr/mipr:	GWSSN997205583	\$10,000.00	
	descriptive data:			
	JON: 66A0200			
	CCC: 6SAR00			
	REF: AF Form 616, #H00000G9730277 dated 25 Mar 99			

ACRN AG
Obligation Amount is increased by '\$10,000.00'

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	30,000.00
TOTAL OBLIGATED		735,320.00

AMENDMENT OF SOLICITATION...MODIFICATION OF CONTRACT				1. CONTRACT ID CODE See Block #2	PAGE OF PAGES 1 of 3
2. AMENDMENT/MODIFICATION NO. F33615-97-D-1045 000107		3. EFFECTIVE DATE FA8650	4. REQUISITION/PURCHASE REQ.NO. See Section G		5. PROJECT NO. (If applicable) CODE S0514A
6. ISSUED BY AFRL/SNKD USAF/AFMC AIR FORCE RESEARCH LAB, BLDG 7 WRIGHT-PATTERSON AFB OH 45433-7607 STEVEN L. WILLIS (937) 255-5252		7. ADMINISTERED BY (If other than Item 6) DCMC SAN DIEGO 7675 DAGGET STREET SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO CA 92128-3499 (619) 592-3641 SAN DIEGO COUNTY			MAILING DATE APR 14 1999	9A. AMENDMENT OF SOLICITATION NO.	
CODE 65409 FACILITY CODE			X	9B. DATED (SEE ITEM 11)	
				10A. MODIFICATION OF CONTRACT/ORDER NO. SEE BLOCK 2	
				10B. DATED (SEE ITEM 13) 12 NOV 1997	
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended.					
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
X	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Limitation of Funds Clause) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.				
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).				
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
	D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)					
SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 x4186 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 18231 COLUMBUS OH 43218-2381 (CODE: HQ0339) The Contracting Officers e-mail address is: Bettie.Steely@ws.wpafb.af.mil					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
15B. CONTRACTOR/OFFEROR			15C. DATE SIGNED		16B. UNITED STATES OF AMERICA
(Signature of person authorized to sign)			BY <u>Bettie L. Steely</u> (Signature of Contracting Officer)		16C. DATE SIGNED 14 Apr 99
NSN 7540-01-152-8070 PREVIOUS EDITION UNUSABLE ConWrite Version 2.81		30-105		STANDARD FORM 30 (REV.10-83) Prescribed by GSA FAR (48 CFR) 53.243	

A. The above numbered contract is hereby modified by increasing the amount set forth in Section B, paragraph 2 by \$54,085.00, thereby making a revised amount allotted of \$725,320.00 which covers all contractual items through 30 Jun 99. The dollar amount and time specified are in accordance with the contractors message dated 7 Apr 99, incorporated herein by reference.

B. Section B - Supplies or Services is modified as follows:

ITEM	SUPPLIES OR SERVICES	Qty Purch Unit	Unit Price Total Item Amount
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000106

FUNDING INFO ONLY

acrn: AF +\$24,085.00

000107

FUNDING INFO ONLY

acrn: AG +\$30,000.00

C. Section G - Contract Administration Data is modified as follows:

ACRN	Appropriation/Lmt	Subhead/Supplemental Accounting Data	Obligation Amount
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AF

57 93600 299 47WL 63666A 6SAT00 05000 63253F 503000 F03000 +\$24,085.00

funding breakdown: On Clin 000106: +\$24,085.00

pr/mipr: GWSSN997205564 \$24,085.00

descriptive data:

JON: 666A0200

CCC: 6SAT00

ACRN AF

Obligation Amount is increased by '\$24,085.00'

ACRN Description is established as

'JON: 666A0200

CCC: 6SAT00'

PR GWSSN997205564 added for \$24,085.00

AG

57 93600 299 4730 673028 056780 00000 35164F 672300 F72300 \$30,000.00

funding breakdown: On Clin 000107: +\$30,000.00

pr/mipr: GWSSN997205540 \$30,000.00

descriptive data:

JON: 66A0200

CCC: 6SAR00

REF: AF Form 616, #H00000G9730249 dated 22 Feb 99

ACRN AG: ACRN Establish

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	204,085.00
AG	000107	30,000.00
TOTAL OBLIGATED		725,320.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					PAGE <u>1</u> OF <u>3</u>
2. PROC INSTRUMENT ID NO. (PIN)	3. SPIN	4. EFFECTIVE DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	6. BOCOMS RATING	
F33615-97-D-1045	000106	MAIL DATE	GWSSN997205293		
7. ISSUED BY AFRL/SNKD USAF/AFMC AIR FORCE RESEARCH LABORATORY, BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252			8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241 SANTA ANA CA 92712-2700		
9. CONTRACTOR NAME AND ADDRESS TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92128 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS			10. SECURITY CLASS U		
11. DISCOUNT FOR PROMPT PAYMENT			12. PURCHASE OFFICE POINT OF CONTACT LSW/L11/LSW		
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS			14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS		
<input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.			The hour and date specified for receipt of Offers <input type="checkbox"/> is extended <input type="checkbox"/> is not extended <div style="text-align: center; font-size: 1.2em; font-weight: bold;">MAILING DATE JAN 20 1999</div>		
<input checked="" type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CONTRACT CLAUSE ENTITLED 'LIMITATION OF FUNDS' THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER. <input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN. <input type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN. <input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO:			15. CONTRACT ADMINISTRATION DATA A. KIND OF MOD B. MOD ABST RECIPIENT ADP PT C. DATE OF SIGNATURE MODIFICATION D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-) E. LOSING POCAD ON TRANSFER F. GAINING POCAD ON TRANSFER G. SYC/AGENCY USE B		
16. ENTER ANY APPLICABLE CHANGES			17. REMARKS (Except as provided herein, all terms and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect.)		
A. PAY CODE B. EFFECTIVE DATE OF AWARD C. CONTRACT (1) TYPE (2) KIND D. TYPE CONTR E. SURV CRIT F. SPL CONTR PROVISIONS G. PAYING OFC CODE H. DATE SIGNED I. SECURITY (1) CLAS (2) DAT OF DD 254 B			SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: Lydia Harris, AFRL/SNAR, (937) 255-4854 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339)		
18. <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT			19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)		
20. NAME AND TITLE OF SIGNER (Type or print)			21. DATE SIGNED		
22. UNITED STATES OF AMERICA (Signature of Contracting Officer)			23. NAME OF CONTRACTING OFFICER (Type or print)		
24. DATE SIGNED			25. DATE SIGNED		
BETTY L. STEELY			30 Jan 99		

A. The above numbered delivery order is hereby amended by increasing the amount set forth in SECTION B, PARAGRAPH 2 by \$180,000.00, thereby making a revised amount allotted of \$671,235.00 which covers all contractual items through 99APR30. The dollar amount and time specified are in accordance with the contractor's letter dated 99JAN07, incorporated herein by reference.

B. Section B - Supplies or Services is modified as follows:

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
000106+			\$	\$

Noun: AF FUNDING 180,000.00

ACRN: AF Sec Clas: NSN:
 Site Codes PQA: ACP: FOB:
 PR No: GWSSN997205293 Proj Mgr:
 Contract Type :

C. Section G - Contract Administration Data is modified as follows:

<u>ACRN</u>	<u>Clas</u>	<u>Appropriation/Lmt Subhead/CPN Recip DODAAD</u>	<u>Obligation</u>
		<u>Supplemental Accounting Classification</u>	<u>Amount</u>
AF+	ACCOUNT		
	UNCLAS	5793600 F03000	\$ 180,000.00
		299 47WL 63666A 6SAT00 05000 63253F 503000	

pr/mipr data:
 GWSSN997205293

Descriptive Data

JON: 666A0200
 CCC: 6SAT00
 COMPLETE

PAYMENT INSTRUCTIONS

Payment for all effort under this delivery order should be made in the order and amounts shown in the informational subclin(s) in Section B, and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00
AF	000106	180,000.00

TOTAL OBLIGATED TO DATE = \$671,235.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT						1 PAGE 1 of 3
2. PROC INSTRUMENT ID NO. (PIN) F33615-97-D-1045	3. SPIN 000105	4. EFFECTIVE DATE MAIL DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO. GWSSN987205178	6. BDC/DMS RATING		
7. ISSUED BY AFRL/SNKO USAF/AFMC Air Force Research Laboratory, BLDG 7 2530 C STREET WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252			8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST., SUITE 200 SAN DIEGO, CA 92111-2241 PAS: NONE			
9. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92128 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS			CODE FA8650	FACILITY CODE MAILING DATE OCT 22 1998	10. SECURITY CLASS U	
11. DISCOUNT FOR PROMPT PAYMENT			12. PURCHASE OFFICE POINT OF CONTACT LSW/L11/LSW			
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS						
<input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. The hour and date specified for receipt of offers: <input type="checkbox"/> is extended <input type="checkbox"/> is not extended Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS						
<input checked="" type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CONTRACT CLAUSE ENTITLED 'LIMITATION OF FUNDS' THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER. <input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN. <input type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN. <input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO:						
15. CONTRACT ADMINISTRATION DATA						
A. KIND OF MOD	B. MOD ABST RECIPIENT ADP PT	C. DATE OF SIGNATURE MODIFICATION	D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)	E. LOSING POC/CAO ON TRANSFER	F. GAINING POC/CAO ON TRANSFER	
G. SVC/AGENCY USE						
16. ENTER ANY APPLICABLE CHANGES						
A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	
G. PAYING OFF CODE			H. DATE SIGNED		I. SECURITY (1) CLASS (2) DAT OF DD 254	
17. REMARKS (Except as provided herein, all terms and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect.)						
SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: Lydia Harris, AFRL/SNAR, (937) 255-4854 EXT 4186 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339)						
18. <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE						
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)			20. UNITED STATES OF AMERICA (Signature of Contracting Officer)			
21. NAME AND TITLE OF SIGNER (Type or print)			22. NAME OF CONTRACTING OFFICER (Type or print)			
23. DATE SIGNED			24. DATE SIGNED			
BETTIE L. STEELY			BETTIE L. STEELY			
			20 Oct 98			

A. The above numbered delivery order is hereby amended by increasing the amount set forth in Section B, Paragraph 2 by \$14,294.00, thereby making a revised amount allotted of \$491,235.00 which covers all contractual items through 13Nov98. The dollar amount and time specified are in accordance with the contractor's letter dated 14Oct98, incorporated herein by reference.

B. Section B - Supplies or Services is modified as follows:

Item No	Quantity	Pur Unit	Unit Price	Total Price
000105+			\$	\$

Noun: AE FUNDING 14,294.00

ACRN: AE Sec Clas: NSN:
 Site Codes PQA: ACP: FOB:
 PR No: GWSSN987205178 Proj Mgr:
 Contract Type :

C. Section G - Contract Administration Data is modified as follows:

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD	Obligation Amount
		Supplemental Accounting Classification	
AE+	ACCOUNT		
	UNCLAS SPECIAL	672300	\$ 14,294.00
		5783600 298 4730 673028 012340 00000 35164F	

pr/mipr data:
 GWSSN987205178+

Descriptive Data

JON: 666A0200
 CCC: 656340
 COMPLETE

NOTE: Attached to the PR is AF Form 616, dated 9 Sep 98, Advice Number H00000G8730433. In addition, the actual PR number on the ABSS system generated AFMC Form 36 is as follows:

5783600 298 4730 673028 012340 00000 35164F 672300

PAYMENT INSTRUCTIONS

Payment for all effort under this delivery order should be made in the order and amounts shown in the informational subclin(s) in Section B, and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	373,341.00
AC	000103	14,000.00
AD	000104	25,000.00
AE	000105	14,294.00

TOTAL OBLIGATED TO DATE = \$491,235.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1	
2. PROC INSTRUMENT ID NO. (PIN)		3. SPIN	4. EFFECTIVE DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	PAGE 1 OF 7	
F33615-97-D-1045		000104	98JUL10	GWLAA987201922 GWLAA987201858	6. BDC/DMS RATING	
7. ISSUED BY AFRL/SNKD USAF/AFMC Air Force Research Laboratory, BLDG 7 2530 C Street WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252			8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
9. CONTRACTOR NAME AND ADDRESS TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92128-3499 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS			10. SECURITY CLASS U		11. DISCOUNT FOR PROMPT PAYMENT	
			IF "R" FOR MULTIPLE FACILITIES SEE SECT "X"		1. ST % DAYS NET DAYS	
					2. NO % DAYS OTHER IF "W" SEE SECT "E"	
			MAILING DATE AUG 03 1998		12. PURCHASE OFFICE POINT OF CONTACT LSW/L11/LSW	
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS						
<input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended <input type="checkbox"/> is not extended.						
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.						
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS						
<input type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER.						
<input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN.						
<input checked="" type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO THE 'CHANGES' CLAUSE IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN.						
<input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO _____						
15. CONTRACT ADMINISTRATION DATA						
A. KIND OF MOD	B. MOD ABST RECIPIENT ADP PT	C. DATE OF SIGNATURE MODIFICATION	D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)	E. LOSING POICAO ON TRANSFER	F. GAINING POICAO ON TRANSFER	G. SVC/AGENCY USE
C			1,510,930.00+			
16. ENTER ANY APPLICABLE CHANGES:						
A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE
17. REMARKS (Except as provided herein, all items and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect.)						
SUBJECT: INCORPORATION OF ADDITIONAL WORK WITHIN SCOPE PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 ext4186 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: HQ0339)						
18. <input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input checked="" type="checkbox"/> 1 COPIES TO ISSUING OFFICE						
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)						
20. NAME AND TITLE OF SIGNER (Type or print) Jeffery K. Thomas Director, Contracts & Mat'l. Mgmt.						
21. DATE SIGNED 7/28/98						
22. UNITED STATES OF AMERICA (Signature of Contracting Officer) THOMAS A. PAYNE						
23. NAME OF CONTRACTING OFFICER (Type or print)						
24. DATE SIGNED 8/8/98						

1. Pursuant to The 'Changes' Clause the above numbered contract is hereby amended to reflect INCORPORATION OF ADDITIONAL WORK as defined in the Modification to the SOW, Attachment 1, dated 11May98 in the amount of \$1,510,930.00 as follows:

COST = \$1,412,574.00
FEE = 98,356.00
TOTAL CPFF = 1,510,930.00

2. As a result of Paragraph 1 above, said contract is specifically modified as set forth below.

3. Section A - Cover Page

The total amount in Block 20 (cover page) is increased by \$1,510,930.00. As a result, the face value is increased by \$1,510,930.00, thereby making a new total contract price of 1,948,871.00.

4. Section B - Supplies or Services is modified as follows:

The additional amount allotted is \$39,000.00 which covers all contractual items for this modification through 98NOV12, in accordance with the contractor's letter dated 98JUL20 incorporated herein by reference. NOTE that the total amount allotted for Delivery Order #1 (and all modifications) is currently \$476,941.00 (reference Section G herein).

Item No	Quantity	Pur Unit	Unit Price	Total Price
0001	1	LO	\$ 1,510,930.00	\$ 1,510,930.00

Noun: RESEARCH AND DATA

ACRN: U Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA987201922 Proj Mgr: U
 GWLAA987201858 Contract Type :

Descriptive Data:

CONDUCT RESEARCH AND DATA IN ACCORDANCE WITH THE STATEMENT OF WORK (SOW) ENTITLED, "COMMUNICATION, NAVIGATION, IDENTIFICATION (CNI) TECHNOLOGY RESEARCH (CTR) INCLUDED TO DELIVERY ORDER #1 AS ATTACHMENT 1, AS MODIFIED BY ATTACHMENT #1 DATED 11MAY98, ATTACHED HERETO.

Item No	Quantity	Pur Unit	Unit Price	Total Price
000103+			\$	\$

Noun: AC FUNDING \$14,000.00

ACRN: AC Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: GWLAA987201922 Proj Mgr: U
 Contract Type :

Item No	Quantity	Pur Unit	Unit Price	Total Price
000104+			\$	\$

Noun: AD FUNDING \$25,000.00

ACRN: AD Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: GWLAA987201858 Proj Mgr: U
 Contract Type :

Item No	Quantity	Pur Unit	Unit Price	Total Price
0002	1	LO	\$ NSP	\$ NSP

Noun: HARDWARE

ACRN: U Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: GWLAA987201858 Proj Mgr: U
 Contract Type :

DESCRIPTION:

Deliver Hardware in accordance with the SOW, Attachment #1 to Delivery Order #1, entitled, "Communication, Navigation, Identification (CNI) Technology Research (CTR), as modified by Attachment #1, dated 11May98, attached hereto.

Noun: SOFTWARE

ACRN: U Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA987201858 Proj Mgr: U
 GWLAA987201922 Contract Type :

Deliver Software in accordance with the SOW, Attachment #1 to Delivery Order #1, entitled, "Communication, Navigation, Identification (CNI) Technology Research (CTR), as modified by Attachment #1, dated 11May98, attached hereto.

Noun: NONDEVELOPMENTAL/MATERIALS

ACRN: U Sec Clas: U NSN: N
Site Codes FQA: D ACP: D FOB: D
PR No: GWLAA987201858 Proj Mgr: U
 GWLAA987201922 Contract Type :

Deliver Nondevelopmental/Material in accordance with the SOW, Attachment #1 to Delivery Order #1, entitled, "Communication, Navigation, Identification (CNI) Technology Research (CTR), as modified by Attachment #1, dated 11May98, attached hereto.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0001	9	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	02NOV11	1
B.		
C.		
D.		
E.		

The scheduled delivery date for the approved Final Technical Report is 11NOV02. All data shall be delivered in accordance with the SOW, Attachment 1 to Delivery Order #1, as Modified by Attachment 1, dated 11May98, attached hereto. The technical effort shall be completed not later than 11Oct02.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0002	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	02OCT11	1
B.		
C.		
D.		
E.		

The scheduled delivery date for the Hardware is 11Oct02. All data shall be delivered in accordance with the SOW, Attachment 1 to Delivery Order #1, as Modified by Attachment 1, dated 11May98, attached hereto, and section H of the Basic contract.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0003	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	02OCT11	1
B.		
C.		
D.		
E.		

The scheduled delivery date for the Software is 11Oct02. All data shall be delivered in accordance with the SOW, Attachment 1 to Delivery Order #1, as Modified by Attachment 1, dated 11May98, attached hereto.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0004	U	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	02OCT11	1
B.		
C.		
D.		
E.		

The scheduled delivery date for the Nondevelopmental/Materials is 11Oct02. All data shall be delivered in accordance with the SOW, Attachment 1 to Delivery Order #1, as Modified by Attachment 1, dated 11May98, attached hereto.

6. Section G - Contract Administration Data is modified as follows:

PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	\$ 64,600.00
AB	000102	\$373,341.00
AC	000103	\$ 14,000.00
AD	000104	\$ 25,000.00

TOTAL OBLIGATED TO DATE: \$476,941.00

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD Supplemental Accounting Classification	Obligation Amount
AC+	ACCOUNT		
	UNCLAS	5783600	
		298 47GB 696999 H26142 59200 000000 875800	\$ 14,000.00

pr/mipr data:
GWLAA987201922

Descriptive Data

JON: 666A0200

CCC: 656340

COMPLETE

Reference DD Form 448 #N46TG985300169, dated 22Apr98.

The MIPR fund cite is as follows:

Appropriation=5783600

Supplemental Accounting Classification=

29 8 47GB 696999 H26142 592 000000 875800

AFZN0003 VB00

ACCTG STA

DODAAD = 000000

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD Supplemental Accounting Classification	Obligation Amount
AD+	ACCOUNT		
	UNCLAS	5783600 F03000	\$ 25,000.00
		298 47WL 6369DF 656300 05000 63203F 503000	

pr/mipr data:
GWLAA987201858

Descriptive Data

JON: 666A0200

CCC: 656300

COMPLETE

The entire fund cite appeared on the PR as follows:

5783600 298 47WL 6369DF 656300 05000 00000 63203F 503000 F03000

7. This Supplemental Agreement constitutes full settlement of any claims of the Contractor under the contract, including the clause entitled 'Changes', arising out of or by reason of the changes effected hereby.

Modification of Statement of Work for DO #1

11 May 98

A requirement exists in the Reference Systems Branch (AFRL/SNAR) for hardware and software enhancements for the Avionics Communication, Navigation, Identification Exploration (ACE) facility.

Contractor shall develop and execute a plan to consolidate hardware assets in the ACE facility to improve existing capabilities for conducting evaluations and demonstrations and decrease maintenance costs for under-utilized equipment.

Contractor shall perform system level anti-jam enhancements to the Antenna WaveFront Simulator (AWFS) which will increase capabilities, to include the integration of a multi-RF Global Positioning System (GPS) simulator into the AWFS, realistic/dynamic jammer platform motion, Inertial Navigation System (INS) aiding to a GPS receiver coordinated with platform motion, realistic/dynamic jammer platform, and scenario control of jammer parameters (power, frequency, etc.). The enhancement shall also include a GPS simulator upgrade to Y-code capability. Contractor shall provide overall scenario and control software and implement new data collection capabilities, including interfaces to different GPS receiver types.

Contractor shall procure materials, replacement components, and parts as required to enhance and upgrade ACE hardware, which improves current system capabilities. Contractor shall also develop a plan to upgrade laboratory resources to facilitate evaluations and experiments in the facility. These tasks shall include, but not be limited to, the replacement of current phase shifter hardware and the procurement of hardware required to increase the broadband power.

Contractor shall assess the feasibility of the development of a new GPS simulator to support next generation signal structures, such as tri-code hexaphase modulation. Contractor shall also conduct in-house evaluations of new waveforms.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1. PAGE <u>1</u> OF <u>3</u>																			
2. PROC INSTRUMENT ID NO. (PIN)		3. SPIN	4. EFFECTIVE DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	6. BOC/DMS RATING																			
F33615-97-D-1045		000103	31 MAR 98	GWLAA987201267																				
7. ISSUED BY: USAF/AFMC AFRL/SNKG BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: MARK J. NEHLS PHONE: (937) 255-5252			CODE FA8650	8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241 CODE S0514A																				
9. CONTRACTOR NAME AND ADDRESS TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92128-3499 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS			CODE 65409	FACILITY CODE IF 'B' FOR MULTIPLE FACILITIES SEE SECT 'A'	10. SECURITY CLASS U																			
11. DISCOUNT FOR PROMPT PAYMENT <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%; text-align: center;">1</td> <td style="width:10%; text-align: center;">ST</td> <td style="width:10%; text-align: center;">%</td> <td style="width:10%; text-align: center;">DAYS</td> <td style="width:10%; text-align: center;">NET</td> <td style="width:10%; text-align: center;">DAYS</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">ND</td> <td style="text-align: center;">%</td> <td style="text-align: center;">DAYS</td> <td style="text-align: center;">OTHER</td> <td style="text-align: center;">IF 'B' SEE SECT 'E'</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">RD</td> <td style="text-align: center;">%</td> <td style="text-align: center;">DAYS</td> <td></td> <td></td> </tr> </table>					1	ST	%	DAYS	NET	DAYS	2	ND	%	DAYS	OTHER	IF 'B' SEE SECT 'E'	3	RD	%	DAYS			12. PURCHASE OFFICE POINT OF CONTACT LMN/L11/LMN	
					1	ST	%	DAYS	NET	DAYS														
2	ND	%	DAYS	OTHER	IF 'B' SEE SECT 'E'																			
3	RD	%	DAYS																					
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS <input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended <input type="checkbox"/> is not extended Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.																								
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS <input type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO _____ THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT ORDER. <input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN. <input checked="" type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO _____ THE 'CHANGES' CLAUSE IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN. <input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO _____																								
15. CONTRACT ADMINISTRATION DATA <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">A. KIND OF MOD</td> <td style="width:10%;">B. MOD ABST RECIPIENT ADP PT</td> <td style="width:10%;">C. DATE OF SIGNATURE MODIFICATION</td> <td style="width:10%;">D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)</td> <td style="width:10%;">E. LOSING POICAO ON TRANSFER</td> <td style="width:10%;">F. GAINING POICAO ON TRANSFER</td> <td style="width:10%;">G. SVC AGENCY USE</td> </tr> <tr> <td>C</td> <td></td> <td></td> <td>137,989.00+</td> <td></td> <td></td> <td></td> </tr> </table>							A. KIND OF MOD	B. MOD ABST RECIPIENT ADP PT	C. DATE OF SIGNATURE MODIFICATION	D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)	E. LOSING POICAO ON TRANSFER	F. GAINING POICAO ON TRANSFER	G. SVC AGENCY USE	C			137,989.00+							
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C			137,989.00+																					
16. ENTER ANY APPLICABLE CHANGES <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">A. PAY CODE</td> <td style="width:10%;">B. EFFECTIVE DATE OF AWARD</td> <td style="width:10%;">C. CONTRACT (1) TYPE (2) KIND</td> <td style="width:10%;">D. TYPE CONTR</td> <td style="width:10%;">E. SURV CRIT</td> <td style="width:10%;">F. SPL CONTR PROVISIONS</td> <td style="width:10%;">G. PAYING OFC CODE</td> <td style="width:10%;">H. DATE SIGNED</td> <td style="width:10%;">I. SECURITY (1) CLASS (2) DAT OF DD 254</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE	H. DATE SIGNED	I. SECURITY (1) CLASS (2) DAT OF DD 254									
A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE	H. DATE SIGNED	I. SECURITY (1) CLASS (2) DAT OF DD 254																
17. REMARKS (Except as provided herein, all items and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect.) SUBJECT: INCORPORATION OF ADDITIONAL WORK PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 FINANCE OFFICE: WEST ENTITLEMENT OPERATIONS, P O BOX 182381 COLUMBUS OH, 43218-2381 (CODE: HQ0339)																								
18. <input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>1</u> COPIES TO ISSUING OFFICE																								
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign) <i>Donovan Baker</i>				22. UNITED STATES OF AMERICA (Signature of Contracting Officer) <i>Bettie L. Stealy</i>																				
20. NAME AND TITLE OF SIGNER (Type or print) Donovan Baker, Contract Manager				23. NAME OF CONTRACTING OFFICER (Type or print) BETTIE L. STEALY																				
21. DATE SIGNED 3 APR 98				24. DATE SIGNED 3 Apr 98																				

B. As a result of Paragraph 1 above, said contract is specifically modified as set forth below.

C. Section A - Cover Page

D. Section B - Supplies or Services is modified as follows:

The amount allotted is \$437,941.00 which covers all contractual items under Delivery Order 0001 through completion. This amount is in accordance with Contractors letter dated 98 Mar 31 incorporated herein by reference.

Noun: ACE MODIFICATION

ACRN: U Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA987201267 Proj Mgr: U
Contract Type :

Descriptive Data

CONDUCTS RESEARCH IN ACCORDANCE WITH ATTACHMENT 1 STATEMENT OF WORK DATED 21 JAN 98

Noun: AB FUNDING 137,989.00

ACRN: AB Sec Clas: NSN:
Site Codes PQA: ACP: FOB:
PR No: GWLAA987201267 Proj Mgr:
Contract Type :

E. Section F - Deliveries or Performance is modified as follows:

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0005	9	U	U	

	<u>Delivery Date</u>	<u>Quantity</u>
A.	98NOV12	1
B.		
C.		
D.		
E.		

F. Section G - Contract Administration Data is modified as follows:

<u>ACRN</u>	<u>Clas</u>	<u>Appropriation/Lmt Subhead/CPN Recip DODAAD</u>	<u>Obligation Amount</u>
AB	ACCOUNT		
	UNCLAS	5783600	
		298 47WL 63666A 676540 05000 63253F 503000	
			F03000 \$ 137,989.00+

pr/mipr data:
GWLAA987201267+

Descriptive Data

JON: 666A0200
CCC: 676540
COMPLETE

DISBURSEMENT WILL BE ACCOMPLISHED FROM AA TO AB.

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 and CLIN 0005 of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

<u>ACRN</u>	<u>SUBCLIN NO.</u>	<u>TOTAL OBLIGATED</u>
AA	000101	64,600.00
AB	000102	373,341.00

G. This Supplemental Agreement constitutes full settlement of any claims of the Contractor under the contract, including the clause entitled 'Changes', arising out of or by reason of the changes effected hereby.

Modification of Statement of Work for DO #1

A requirement exists in the Avionics Technology Testbed Branch (WL/AAST) to modify a Northern Telecom STR2760/02 GPS simulator. The simulator is located in the Avionics Communication, Navigation, Identification Exploration (ACE) facility, and is included on the list of equipment to be maintained by the ACE contractor under DO 01. The simulator enhancement will provide independent RF L1/L2 channels, such that each channel can support the testing and evaluation of controlled reception pattern antenna control units and a selective availability/anti-spoofing (SA/AS) capability. The simulator upgrade will enhance the current capability of the Antenna WaveFront Simulator (AWFS) and therefore will require additional contractor personnel to facilitate the implementation and integration of the upgrade.

There is also a specific requirement to create and implement real-time aircraft motion models (e.g., C-130, F-15, and possibly F-117), implement up to two inertial navigation unit (INU) models, and provide interfaces for transmitting data from the platform and INU to the Northern Telecom GPS simulator, Antenna WaveFront Simulator, and GPS receiver systems. This task requires a specialist in the areas of INU modeling, realtime aircraft modeling, MIL-STD-1553B bus control, and software design.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT						1.																									
2. PROC INSTRUMENT ID NO. (PIN) F33615-97-D-1045		3. SPIN 000102		4. EFFECTIVE DATE MAIL DATE		5. REQUISITION/PURCHASE REQUEST PROJECT NO. GWLAA987201267																									
7. ISSUED BY USAF/AFMC/ASC WRIGHT LABORATORY WL/AAKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: BETTIE L. STEELY PHONE: (937) 255-2206		CODE FA8650		8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST., STE 200 SAN DIEGO CA 92111-2241 PAS: NONE		CODE S0514A																									
9. CONTRACTOR NAME AND ADDRESS TRW INC MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92128 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS		CODE 65409		FACILITY CODE MAILING DATE MAR 06 1998		10. SECURITY CLASS U																									
				IF 'X' FOR MULTIPLE FACILITIES SEE SECT 'E'		11. DISCOUNT FOR PROMPT PAYMENT																									
						<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"></th> <th colspan="2">NET</th> <th colspan="2">DAYS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ST</td> <td>%</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>NO</td> <td>%</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>RD</td> <td>%</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				NET		DAYS		1	ST	%				2	NO	%				3	RD	%			
		NET		DAYS																											
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2	NO	%																													
3	RD	%																													
						12. PURCHASE OFFICE POINT OF CONTACT L11/L11/L11																									
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS <input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. The hour and date specified for receipt of offers <input type="checkbox"/> is extended <input type="checkbox"/> is not extended Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.																															
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS <input checked="" type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CONTRACT CLAUSE ENTITLED 'LIMITATION OF FUNDS' THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER. <input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN. <input type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO _____ IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN. <input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO _____																															
15. CONTRACT ADMINISTRATION DATA <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>A. KIND OF MOD</th> <th>B. MOD ABST RECIPIENT ADP PT</th> <th>C. DATE OF SIGNATURE MODIFICATION</th> <th>D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)</th> <th>E. LOSING PO/CAO ON TRANSFER</th> <th>F. GAINING PO/CAO ON TRANSFER</th> <th>G. SVC/AGENCY USE</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align: center;">B</td> </tr> </tbody> </table>								A. KIND OF MOD	B. MOD ABST RECIPIENT ADP PT	C. DATE OF SIGNATURE MODIFICATION	D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)	E. LOSING PO/CAO ON TRANSFER	F. GAINING PO/CAO ON TRANSFER	G. SVC/AGENCY USE	B																
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B																															
16. ENTER ANY APPLICABLE CHANGES <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>A. PAY CODE</th> <th>B. EFFECTIVE DATE OF AWARD</th> <th>C. CONTRACT (1) TYPE (2) KIND</th> <th>D. TYPE CONTR</th> <th>E. SURV CRIT</th> <th>F. SPL CONTR PROVISIONS</th> <th>G. PAYING OFC CODE</th> <th>H. DATE SIGNED</th> <th>I. SECURITY (1) CLASS (2) DAT OF DD 254</th> </tr> </thead> <tbody> <tr> <td colspan="9" style="height: 40px;"></td> </tr> </tbody> </table>								A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE	H. DATE SIGNED	I. SECURITY (1) CLASS (2) DAT OF DD 254															
A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE	H. DATE SIGNED	I. SECURITY (1) CLASS (2) DAT OF DD 254																							
17. REMARKS (Except as provided herein, all items and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect.) SUBJECT: INCREMENTAL FUNDING PROJECT ENGINEER: Lydia Harris, AFRL/SNAR, (937) 255-4854 FINANCE OFFICE: DFAS CO SANTA ANA, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: SC1006)																															
18. <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE																															
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)				22. UNITED STATES OF AMERICA (Signature of Contracting Officer)																											
20. NAME AND TITLE OF SIGNER (Type or print)				23. NAME OF CONTRACTING OFFICER (Type or print)																											
				BETTIE L. STEELY																											
21. DATE SIGNED				24. DATE SIGNED																											
				5 Mar 98																											

A. The above numbered contract is hereby amended by increasing the amount set forth in Section B, Paragraph 2 by \$160,352.00, thereby making a revised amount allotted of \$299,952.00 which completes the funding for all contractual items.

B. Section B - Supplies or Services is modified as follows:

Item No	Quantity	Pur Unit	Unit Price	Total Price
000102+			\$	\$

Noun: AB FUNDING 160,352.00

ACRN: AB Sec Clas: NSN:
 Site Codes PQA: ACP: FOB:
 PR No: GWLAA987201267 Proj Mgr:
 Contract Type :

C. Section G - Contract Administration Data is modified as follows:

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD	Obligation Amount
AB	ACCOUNT	Supplemental Accounting Classification	
	UNCLAS	5783600	
		298 47WL 63666A 676540 05000 63253F 503000	\$ 160,352.00+

pr/mipr data:
 GWLAA987201267+

Descriptive Data

JON: 666A0200
 CCC: 656540
 COMPLETE

PAYMENT INSTRUCTIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	235,352.00

1. The above numbered contract is hereby amended by increasing the amount set forth in Section B, Paragraph 2 by \$114,500.00, thereby making a revised amount allotted of \$132,500.00 which covers all contractual items through 98FEB27. The dollar amount and time specified are in accordance with the contractor's letter dated 03JAN21, incorporated herein by reference.

2. Section G - Contract Administration Data is modified as follows:

ACRN	Clas	Appropriation/Lmt Subhead/SPN Recip DODAAD Supplemental Accounting Classification	Obligation Amount
AA	ACCOUNT		
	UNCLAS	5773600 F03000	\$ 39,600.00+
		297 47WL 63666A 656540 05000 63253F 503000	

pr/mipr data:
 GWLAA987201513+
 GWLAA987201321+

Descriptive Data

JON: 666A0200
 CCC: 656540
 COMPLETE

ACRN	Clas	Appropriation/Lmt Subhead/SPN Recip DODAAD Supplemental Accounting Classification	Obligation Amount
AB+	ACCOUNT		
	UNCLAS	5783600 F03000	\$ 75,000.00
		298 47WL 63666A 676540 05000 63253F 503000	

pr/mipr data:
 GWLAA987201254



Descriptive Data

JON: 666A0200
 CCC: 656540
 COMPLETE

3. PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS:

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRN	SUBCLIN NO.	TOTAL OBLIGATED
AA	000101	64,600.00
AB	000102	75,000.00

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF	PAGE OF PAGES 1 of 2
2. AMENDMENT/MODIFICATION NO. P00006		3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)
6. ISSUED BY: AFRL/SNKD CODE		FA8650	7. ADMINISTERED BY (If other than Item 6)		CODE S0514A
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 COURTNEY L. MCLANE 937-255-2851 courtney.mclane@wpafb.af.mil			DCMA SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241		
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)			(X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 10B. DATED (SEE ITEM 13)		
TRW INC. RADIO SYSTEMS ONE RANCHO CARMEL SAN DIEGO CA 92128 (656) 592-3314			MAILING DATE DEC 12 2002		
CODE 65439		FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS					
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
12. ACCOUNTING AND APPROPRIATION DATA (If required)					
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.					
(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 14A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). X C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: 52.204-2 Security Requirements (AUG 1996) D. OTHER (Specify type of modification and authority)					
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input checked="" type="checkbox"/> is required to sign this document and return 1 copies to the issuing office.					
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: INCORPORATION OF A REVISED FORM DD254 CHANGE IN CONTRACT VALUE: NONE PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNRW, 937-255-4854 EXT. 4186 FINANCE OFFICE: DFAS-COWEST ENTITLEMENT OPERATIONS, PO BOX 182381, COLUMBUS, OH 43218-2381					
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.					
15A. NAME AND TITLE OF SIGNER (Type or print)			16A. NAME AND TITLE OF SIGNER (Type or print)		
			DAVID L. SHELLABARGER Contracting Officer		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED
 (Signature of person authorized to sign)		11/20/02	 BY (Signature of Contracting Officer)		9 Dec 02

1. In accordance with FAR 52.204-2 Security Requirements (Aug 1996), the below number contract is hereby amended to reflect INCORPORATION OF A REVISED DD FORM 254.
2. Section J - List of Documents, Exhibits, and Other Attachments, Attachment #2, Contract Security Classification (DD Form 254), dated 98 Aug 11 is hereby superseded by the attached DD form 254, dated 02 Aug 23.
3. This Supplemental Agreement constitutes a full settlement of any changes of the contractor rising out of, or connected with, the changes affected hereby.

DEPARTMENT OF DEFENSE CONTRACT SECURITY CLASSIFICATION SPECIFICATION				1. CLEARANCE AND SAFEGUARDING	
<i>(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort)</i>				a. FACILITY CLEARANCE REQUIRED	
				SECRET	
				b. LEVEL OF SAFEGUARDING REQUIRED	
				NA	
2. THIS SPECIFICATION IS FOR: (X and complete as applicable)				3. THIS SPECIFICATION IS: (X and complete as applicable)	
<input checked="" type="checkbox"/> a. PRIME CONTRACT NUMBER F33614-97-D-1045 Comp. Date: 30 Apr 04		<input type="checkbox"/> a. ORIGINAL (Complete date in all cases) Date (YYMMDD) 97 10 17			
<input type="checkbox"/> b. SUBCONTRACT NUMBER		<input checked="" type="checkbox"/> b. REVISED (Supersedes all previous specs) Revision No. 4		Date (YYMMDD) 2 08 23	
<input type="checkbox"/> c. SOLIDIFICATION OR OTHER NUMBER DUE Date (YYMMDD)		<input type="checkbox"/> c. FINAL (Complete item 5 in all cases)		Date (YYMMDD)	
4. IS THIS A FOLLOW-ON CONTRACT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: Classified material received or generated under _____ (Preceding Contract Number) is transferred to this follow-on contract.					
5. IS THIS A FINAL DD FORM 254? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO. If Yes, complete the following: In response to the contractor's requested dated _____, retention of the identified classified material is authorized for the period of _____.					
6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)					
a. NAME, ADDRESS, AND ZIP CODE TRW Inc Space & Electronics Group Avionics Sys Div PO Box 289000 San Diego CA 92128-9000		b. CAGE CODE 65409		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) DSS WEST REGION ONE WORLD TRADE CENTER STE 622 LONG BEACH CA 90831-0622	
7. SUBCONTRACTOR					
a. NAME, ADDRESS, AND ZIP CODE NA		b. CAGE CODE NA		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) NA	
8. ACTUAL PERFORMANCE					
a. LOCATION TRW Dayton Avionics Systems Division 1900 Founders Drive Suite 202 Kettering, OH 45420-4011		b. CAGE CODE 8T321		c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) DSS CENTRAL REGION 5800 EAST CAMPUS CIRCLE STE 110A IRVING TX 75063-2739	
9. GENERAL IDENTIFICATION OF THIS PROCUREMENT					
The Advanced Concepts Exploration (ACE) effort focuses on promoting research and development (R&D), performing in-house assessments of Global Positioning System (GPS) anti-jam concepts and developing corresponding hardware-in-the-loop simulation technologies to evaluate performance.					
10. THIS CONTRACT WILL REQUIRE ACCESS		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:	
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	
b. RESTRICTED DATA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY	
c. CRITICAL/NUCLEAR WEAPON DESIGN INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	
d. FORMERLY RESTRICTED DATA		<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	
e. INTELLIGENCE INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. PERFORM SERVICES ONLY	
1. Sensitive Compartmented Information (SCI)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	
2. Non-SCI		<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	
f. SPECIAL ACCESS INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT	
g. NATO INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. HAVE TEMPEST REQUIREMENTS	
h. FOREIGN GOVERNMENT INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	
i. LIMITED DISSEMINATION INFORMATION		<input type="checkbox"/>	<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	
j. FOR OFFICIAL USE ONLY INFORMATION		<input checked="" type="checkbox"/>	<input type="checkbox"/>	l. OTHER (Specify)	
k. OTHER (Specify)		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Notification of government security activity is required. See addendum.	

12. **PUBLIC RELEASE.** Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify):

ASC/PA Bldg 14
1865 4th Street, Suite 15
WPAFB OH 45433-6503

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs) for review.
In the case of Non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. **SECURITY GUIDANCE.** The security classification guidance need for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other controlling factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guidelines/extracts reference herein. Add additional pages as needed to provide complete

The National Industrial Security Program Operating Manual (NISPOM), Jan 95, applies to this contract.

- a. Ref Bk 10a: COMSEC Safeguarding requirements apply. For on base performance, COMSEC is incumbent on the government.
- b. Ref Bk 10j: For Official use Only (FOUO) applies. See addendum.
- c. Ref Bk 10a. Releasing government activity will furnish complete classification guidance for the service to be performed. On base performance in support of AFRL/SNRW will occur in Bldg 620, Area B, WPAFB OH. If any classified information is generated in the performance of this contract at the identified location, the contractor shall apply derivative classification and markings consistent with the source material.
- d. Ref Bk 11i: The Notification of Government Security Activity and Visitor Group Security Agreement clause applies. See contract Section I for details.
- e. Ref Bk 12f: **DISTRIBUTION: 88TH SFS/SFAS, 1801 Tenth St., Rm. 103, WPAFB OH 45433-7625**
AFRL/SNOY (ATTN: Security Manager), 2241 Avionics Circle, WPAFB OH 45433
- f. Transfer of documents to other IR&D efforts is not permitted.
- g. Program Manager: Lydia M. Harris, AFRL/SNRW, (937) 255-4854, x4186

14. **ADDITIONAL SECURITY REQUIREMENTS.** Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify specific contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.) Yes ☐ No ☒

15. **INSPECTIONS.** Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.) Yes ☒ No ☐

Ref Bk 11i. Contractor performance will occur at WPAFB. DSS is relieved of all inspection responsibilities for contractor performance in the installation. 88 SFS/SFAS will maintain security oversight.

16. **CERTIFICATION AND SIGNATURE.** Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL	b. TITLE	c. TELEPHONE (Include Area Code)
David L. Shellabarger	Contracting Officer	(937) 255-4863
d. ADDRESS (Include Zip Code)	17. REQUIRED DISTRIBUTION	
AFRL/SNKD	<input checked="" type="checkbox"/> a. CONTRACTOR	
2310 Eighth Street, Bldg 167	<input checked="" type="checkbox"/> b. SUBCONTRACTOR	
WPAFB, OH 45433-7801	<input checked="" type="checkbox"/> c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR	
e. SIGNATURE	<input checked="" type="checkbox"/> d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION	
	<input checked="" type="checkbox"/> e. ADMINISTRATION CONTRACTING OFFICER	
	<input checked="" type="checkbox"/> f. OTHERS AS NECESSARY	

88SFS/SFAS
COORDINATION
PC-ONLY
23 Aug 92

ADDENDUM TO DD FORM 254 (Block 10j)

FOR OFFICIAL USE ONLY (FOUO)

(Reference DoD Regulation 5400.7/Air Force Supplement, 22 July 1999)

1. **GENERAL:** FOUO is information that has not been given a security classification pursuant to the criteria of an Executive Order, but which may be withheld from the public because disclosure would cause a foreseeable harm to an interest protected by one or more of the Freedom of Information Act (FOIA) exemptions 2 through 9. Additional information on FOUO may be obtained by contacting the User Agency. FOUO is assigned to information at the time it is created in a DoD Agency or derivatively as instructed in a Security Classification Guide.

2. **MARKING:**

a. FOUO information received (released by a DoD component) should contain the following marking, when received: **THIS DOCUMENT CONTAINS INFORMATION EXEMPT FROM MANDATORY DISCLOSURE UNDER FOIA. EXEMPTION(S) _____ APPLIES APPLY.**

b. Mark an unclassified document containing FOUO information "FOR OFFICIAL USE ONLY" at the bottom of each page containing FOUO information and on the bottom of the front page or front cover (if any) and on the back of the last page and on the back cover (if any). Each paragraph containing FOUO information shall be marked as such.

c. Within a classified document, an individual page that contains both FOUO and classified information shall be marked at the top and bottom with the highest security classification of information appearing on the page. Individual paragraphs shall be marked at the appropriate classification level, as well as unclassified or FOUO, as appropriate. An individual page that contains FOUO information but no classified information shall be marked "FOR OFFICIAL USE ONLY" at the top and bottom of the page, as well as each paragraph that contains FOUO information. NOTE: For "production efficiency" the entire document may be marked top and bottom with the highest level of classification contained within it, as long as every paragraph is marked to reflect the specific classification of the information it contains.

d. Mark other records, such as computer print outs, photographs, films, tapes, or slides "FOR OFFICIAL USE ONLY" so that the receiver or viewer knows the record contains FOUO information.

e. Mark each part of a message that contains FOUO information. Unclassified messages containing FOUO information must show the abbreviation "FOUO" before the text begins.

3. **DISSEMINATION:** FOUO may be disseminated between officials of DoD Components, DoD contractors, consultants and grantees to conduct official business for DoD. Recipients shall be made aware of the status of such information and transmission shall be by means that preclude unauthorized public disclosure.

4. **TRANSMISSION:** FOUO information shall be transmitted in a manner that prevents disclosure of the contents. When not commingled with classified information, it may be sent via first-class mail or parcel post. Bulky shipments, i.e. testing materials, that otherwise qualify under postal regulations, may be sent by fourth-class mail. FOUO information may also be sent over facsimile equipment; however, when deciding whether to use this means, balance the sensitivity of the records against the risk of disclosure. Consider the location of sending and receiving machines and ensure authorized personnel are available to receive the FOUO information as soon as it is transmitted. Transmittal documents shall call attention to the presence of FOUO attachments. FOUO information may also be sent via e-mail, if it is sent via a system that will prevent unintentional or unauthorized disclosure.

5. **STORAGE:** To safeguard FOR OFFICIAL USE ONLY records during normal duty hours, place them in an out-of-sight location if your work area is accessible to persons who do not have a valid need for the information. After normal duty hours, store FOUO records to prevent unauthorized access. File them with other unclassified records in unlocked files or desks when normal internal building security is provided. When there is no internal building security, locked buildings or rooms normally provide adequate after-hours protection. If such protection is not considered adequate, FOUO material shall be stored in locked containers such as file cabinets, desks, or bookcases. *Expenditure of funds for security containers or closed areas solely for the protection of FOUO data is prohibited.*

6. **DESTRUCTION:** When no longer needed, FOUO information shall be disposed of by any method that will preclude its disclosure to unauthorized individuals.

Effective 12 February 2002

ADDENDUM TO DD FORM 254 (Blk 111)
NOTIFICATION OF WPAFB SERVICING SECURITY ACTIVITY

1. Thirty days **before** the date Contractor operations will begin on Wright-Patterson AFB OH (WPAFB), the Contractor shall provide to 88 SFS/SPAS Bldg 8, 1801 Tenth Street, WPAFB, OH 45433-7625 the following information:

- a. The name, address, and telephone number of your company's Facility Security Officer and your designated on-site security representative;
- b. The contract number and military contracting command;
- c. The highest classification category of defense information to which Contractor employees will have access;
- d. The date Contractor operations will begin on WPAFB OH;
- e. The estimated completion date of operations on WPAFB OH;

2. This requirement is in addition to visit request notification procedures contained in DoD 5220.22M, National Industrial Security Program Operating Manual, Chapter 6.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE U - CPFF		PAGE OF PAGES 1 of 2	
2. AMENDMENT/MODIFICATION NO. P00005		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY AFRL/SNKD CODE		FA8650		7. ADMINISTERED BY (If other than Item 6)		CODE S0514A	
USAF/AFMC AIR FORCE RESEARCH LABORATORY 2310 EIGHTH STREET, BUILDING 167 WRIGHT-PATTERSON AFB OH 45433-7801 SCOTT A. SIZEMORE (937) 255-4149 scott.sizemore@wpafb.af.mil				DCM SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW INC. RADIO SYSTEMS ONE RANCHO CARMEL SAN DIEGO CA 92128 (658) 592-3314				MAILING DATE			
				JUL 22 2002			
				X			
CODE 65479		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							
<input type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers <input type="checkbox"/> is extended, <input type="checkbox"/> is not extended. Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.							
12. ACCOUNTING AND APPROPRIATION DATA (If required)							
13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.							
X A. THE CHANGE ORDER IS ISSUED PURSUANT TO: (Mutual Agreement of the Parties) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A. B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF D. OTHER (Specify type of modification and authority)							
E. IMPORTANT: Contractor <input checked="" type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.							
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SUBJECT: Period of Performance Extension PCO E-Mail Address: david.shellabarger@afri.af.mil CHANGE IN CONTRACT AMOUNT: None CHANGE IN OBLIGATION: None PROJECT ENGINEER: Lydia Harris, AFRL/SNRW, (937) 255-4854 X 4186 FINANCE OFFICE: DFAS-CO/West Entitlement Operations, P.O. Box 182381, Columbus OH, 43218-2381							
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.							
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF SIGNER (Type or print)			
				DAVID L. SHELLABARGER Contracting Officer			
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED		16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
				David L Shellabarger BY (Signature of Contracting Officer)		22 Jul 02	
(Signature of person authorized to sign)							

1. This modification is being issued pursuant to the Mutual Agreement of the Parties to extend the overall period of performance from "60 MARO" (11 Nov 02) to "30 Apr 04". The time specified is in accordance with the contractor's letter dated 16 Jul 02. The contractor has agreed to accept a unilateral modification for the change, as indicated in the contractor's email, dated 16 Jul 02, incorporated herein by reference.

2. As a result of paragraph 1, the contract is modified as follows:

a. SECTION I - Contract Clauses, is modified as follows:

FAR Clause 52.216-22, Indefinite Quantity, Paragraph (d) is modified to extend the period of performance as follows:

FROM:	TO:
60 MARO	30 APR 04

b. SECTION J - List of Attachments, is modified as follows:

Exhibit A, Contract Data Requirements List (DD Form 1423), Data Item A001 is modified as follows:

BLOCK:	FROM:	TO:
11	56 MAC	31 DEC 03
12	57 MAC	30 JAN 04
13	60 MAC	30 APR 04

3. Except as noted above all other terms and conditions of the contract remain unchanged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE
U - CPFFPAGE OF PAGES
1 of 2

2. AMENDMENT/MODIFICATION NO. P00004	3. EFFECTIVE DATE 00 SEP27	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY AFRL/SNKO CODE FA8650	7. ADMINISTERED BY (If other than item 6) DCM SAN DIEGO 7675 DAGGET ST SUITE 200 SAN DIEGO CA 92111-2241	8. PROJECT NO. (If applicable) S0514A	
9. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) TRW AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS ONE RANCHO CARMEL SAN DIEGO CA 92128-3499 (619) 592-3641 SAN DIEGO COUNTY See DD254 for Cleared Address CODE 65409 FACILITY CODE		(X) 9A. AMENDMENT OF SOLICITATION NO. 9B. DATED (SEE ITEM 11) 10A. MODIFICATION OF CONTRACT/ORDER NO. F33615-97-D-1045 10B. DATED (SEE ITEM 13)	

MAILING DATE

SEP 27 2000

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 10, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: () THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of the Parties
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

SUBJECT: MODIFICATION TO CONTRACT FAR CLAUSE, 52.216-19
PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 EXT 4186
FINANCE OFFICE: WEST INTITLEMENT OPERATIONS, P.O. BOX 182381, COLUMBUS, OH 43218-2381 (CODE: HQ0339)
The Contracting Officer's email address is: Bettie.Steely@wpafb.af.mil

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF SIGNER (Type or print)
	BETTIE L. STEELY Contracting Officer
15B. CONTRACTOR OFFEROR	15C. DATE SIGNED
(Signature of person authorized to sign)	BY: <i>Bettie L. Steely</i> (Signature of Contracting Officer)
	16C. DATE SIGNED 27 Sep 00

NSN 7540-01-152-9000
PREVIOUS EDITION UNUSABLE
ConWrite Version 3.90

30-105

STANDARD FORM 30 (REV.10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

A. Pursuant to the Mutual Agreement of the Parties and in accordance with the contractor's letter dated 20 JUL 2000, incorporated herein by reference, contract FAR Clause, 52.216-19 (Order Limitations), is hereby modified to reflect the following:

Para (b)(1) is changed to read \$2,500,000.00

Para (b)(2) is changed to read \$2,500,000.00

B. From hence forth, the program name in this basic contract and all modifications and delivery orders is changed as follows:

From: Avionics Communication, Navigation, Identification Concepts Exploration (ACE).

To: Advanced Concepts Explorations (ACE).

C. All other terms and conditions remain unchanged.

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1. PAGE 1 OF 2		
2. PROGRAM INSTRUMENT ID NO. (PIN) F33615-97-D-1045		3. SPIN P00003		4. EFFECTIVE DATE MAIL DATE		5. REQUISITION/PURCHASE REQUEST PROJECT NO.	
7. ISSUED BY AFRL/SNKR USAF/AFMC Air Force Research Laboratory, BLDG 7 2530 C STREET WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252				8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DQMC SAN DIEGO 7675 DAGGET ST., SUITE 200 SAN DIEGO, CA 92111-2241 PAS: NONE		9. CODE S0514A	
10. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS				11. FACILITY CODE IF 'N' FOR MULTIPLE FACILITIES SEE SECT 'N'		12. SECURITY CLASS U	
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS <input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. For value of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				14. DISCOUNT FOR PROMPT PAYMENT 1 ST % DAYS 2 ND % DAYS 3 RD % DAYS NET DAY S OTHER IF "F" SEE SECT 'E'		15. PURCHASE OFFICE POINT OF CONTACT LSW/L11/LSW	
16. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS <input type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT ORDER. <input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN. <input checked="" type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO MUTUAL AGREEMENT OF THE PARTIES & FAR 43.103(a) (3). IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN. <input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO _____							
17. CONTRACT ADMINISTRATION DATA A. KIND OF MOD B. MOD ABST C. DATE OF SIGNATURE MODIFICATION D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-) E. LOSING POICAO ON TRANSFER F. GAINING POICAO ON TRANSFER G. AGENCY USE B							
18. ENTER ANY APPLICABLE CHANGES A. PAY CODE B. EFFECTIVE DATE OF AWARD C. CONTRACT (1) TYPE (2) KIND D. TYPE CONTR E. SURV CRIT F. SPL CONTR PROVISIONS G. PAYING OFC CODE H. DATE SIGNED I. SECURITY (1) CLASS (2) DAT OF DD 254 TS 98AUG11							
19. REMARKS: Except as provided herein, all terms and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect. SUBJECT: INCORPORATION OF A REVISED DD FORM 254 PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 EXT 4186 FINANCE OFFICE: DFAS-CO/SANTA ANA, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: SC1006).							
20. CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN COPIES TO ISSUING OFFICE <input checked="" type="checkbox"/> 1							
21. CONTRACTOR/OFFEROR (Signature of person authorized to sign) J. D. Van Duker, Contract Manager				22. UNITED STATES OF AMERICA (Signature of Contracting Officer) BETTY L. STEELY			
23. NAME AND TITLE OF SIGNER (Type or print) J. D. Van Duker, Contract Manager				24. DATE SIGNED 8/26/98			

1. Pursuant to MUTUAL AGREEMENT OF THE PARTIES, and FAR 43.103(a)(3), the above number contract is hereby amended to reflect INCORPORATION OF A REVISED DD FORM 254.
2. Section J - List of Documents, Exhibits, and Other Attachments, Attachment #2, Contract Security Classification (DD Form 254), dated 98JUN16 is hereby superseded by the attached DD Form 254, dated 98AUG11.
3. This Supplemental Agreement constitutes a full settlement of any changes of the contractor rising out of, or connected with, the changes affected hereby.

**DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION SPECIFICATION**

(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort)

1. CLEARANCE AND SAFEGUARDING

a. FACILITY CLEARANCE REQUIRED

TOP SECRET

b. LEVEL OF SAFEGUARDING REQUIRED

TOP SECRET

2. THIS SPECIFICATION IS FOR: (X and complete as applicable)

<input checked="" type="checkbox"/>	a. PRIME CONTRACT NUMBER F33615-97-D-1045	Exp Date: 02 11 11
	b. SUBCONTRACT NUMBER	
	c. SOLICITATION OR OTHER NUMBER	DUE Date (YYMMDD)

3. THIS SPECIFICATION IS: (X and complete as applicable)

a. ORIGINAL (Complete date in all cases)	Date (YYMMDD) 97 10 17
<input checked="" type="checkbox"/> b. REVISED (Supersedes all previous specs)	Revision No. 03 Date (YYMMDD) 98 08 11
c. FINAL (Complete item 5 in all cases)	Date (YYMMDD)

4. IS THIS A FOLLOW-ON CONTRACT?

☐ YES ☒ NO

If Yes, complete the following:

Classified material received or generated under

(Preceding Contract Number) is transferred to this follow-on contract

5. IS THIS A FINAL DD FORM 254?

☐ YES ☒ NO

If Yes, complete the following:

In response to the contractor's requested dated

, retention of the identified classified material is authorized for the period of

6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)

a. NAME, ADDRESS, AND ZIP CODE TRW AVIONICS & SURVEILLANCE GROUP P.O. Box 280000 San Diego CA 92128-9000	b. CAGE CODE 65409	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) Defense Security Service Industrial Security FO (S53SD) 16885 W. Bernardo Drive, Ste 150 San Diego CA 92127
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7. SUBCONTRACTOR

a. NAME, ADDRESS, AND ZIP CODE NA	b. CAGE CODE NA	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) NA
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8. ACTUAL PERFORMANCE

a. LOCATION TRW, Inc. 1900 Founder's Drive Kettering OH 45420-4011	b. CAGE CODE 8T321	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) Defense Security Service Industrial Security FO (S11DY) 2900 Presidential Drive Suite 340 Fairborn OH 45324-0628
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9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

The Avionics CNI Concepts Exploration (ACE) technical effort will focus on the development and demonstration of technology to enable cost-effective evaluations/demonstrations of advanced avionics architectures; and define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems.

10. THIS CONTRACT WILL REQUIRE ACCESS TO:		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:		YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	<input checked="" type="checkbox"/>			a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY			<input checked="" type="checkbox"/>
b. RESTRICTED DATA			<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY			<input checked="" type="checkbox"/>
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION			<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	<input checked="" type="checkbox"/>		
d. FORMERLY RESTRICTED DATA	<input checked="" type="checkbox"/>			d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE			<input checked="" type="checkbox"/>
e. INTELLIGENCE INFORMATION				e. PERFORM SERVICES ONLY			<input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (SCI)	<input checked="" type="checkbox"/>			f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES			<input checked="" type="checkbox"/>
(2) Non-SCI	<input checked="" type="checkbox"/>			g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	<input checked="" type="checkbox"/>		
f. SPECIAL ACCESS INFORMATION	<input checked="" type="checkbox"/>			h. REQUIRE A COMSEC ACCOUNT	<input checked="" type="checkbox"/>		
g. NATO INFORMATION	<input checked="" type="checkbox"/>			i. HAVE TEMPEST REQUIREMENTS	<input checked="" type="checkbox"/>		
h. FOREIGN GOVERNMENT INFORMATION	<input checked="" type="checkbox"/>			j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS			<input checked="" type="checkbox"/>
i. LIMITED DISSEMINATION INFORMATION			<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE	<input checked="" type="checkbox"/>		
l. FOR OFFICIAL USE ONLY INFORMATION	<input checked="" type="checkbox"/>			l. OTHER (Specify) Notification of government security activity is required.	<input checked="" type="checkbox"/>		
m. OTHER (Specify)							

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify):

ASC/PA Bldg 14
1865 4th Street, Suite 15
WPAFB OH 45433-6508

In the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs) for review.
In the case of non DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance used for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. If it is appropriate for the classified effort, attach, or forward cover letters in correspondence, any document guidelines reference herein. Add additional pages as needed to provide complete guidance.

- a. Ref Blk 1b: The prime contractor will not require a Top Secret safeguarding capability. The subcontractor will safeguard all Top Secret material under this contract, which they will receive directly from the Government.
- b. Ref Blk 10a: COMSEC and/or cryptographic requirements apply. See DoD 5220.22-S for details.
- c. Ref Blk 10e(1): SCI requirements apply. See addendum.
- d. Ref Blk 10e(2): General Intelligence Material/Foreign Disclosure applies. See addendum.
- e. Ref Blk 10f: The GPS Joint Program Office (SMC/CZ) will issue special guidance regarding special access requirements.
- f. Ref Blk 10j: For Official Use Only (FOUO) applies. See Addendum.
- g. Ref Blk 11c: Any classified information generated in the performance of this contract shall require the contractor to apply derivative classification and markings consistent with the source material. The use of cellular telephones, hand held radios, beepers/pagers, cordless telephones and cordless microphones in a computer facility where classified processing is accomplished requires special consideration. These considerations are outlined in (U) Air Force System Security Memo (AFSSM) 7011, 1 July 1996, para 3.6. See Addendum.
- h. Ref Blk 11i: EMSEC requirements apply. For on-base performance, EMSEC requirements are incumbent on the Government.
- i. Ref Blk 11k: DCS address is HQ Defense Courier System, Bldg P-830, Ft George G. Meade MD, 20755-5370.
- j. Ref Blk 11l: The Notification of Government Security Activity and Visitor Group Security Agreement clause applies. See contract clause in Section I for details.
- k. Ref Blk 11i: On-base performance in Area B, Bldg 620, WPAFB OH 45433-7334.
- l. Transfer of documents to other IR&D efforts is not permitted.
- m. The National Industrial Security Program Operating Manual (NISPOM), Jan 95, applies.
- n. Program Manager: Lydia M. Harris, AFRL/SNAR, 255-4854 (ext 4186)

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.

☒ Yes ☐ No

Ref Blk 10e(1) SCI requirements apply. See addendum.

Ref Blk 10f: Special Access Requirements apply.

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. If Yes, identify specific areas or statements covered out and the activity responsible for inspections. Use Item 13 if additional space is needed.

☒ Yes ☐ No

Contractor performance will occur at Wright-Patterson Air Force Base Ohio, with the exception of a small percentage of work which will be done at the contractor's facility. DSS is relieved of all inspection responsibility for prime contractor performance on the installation. ASC/SYSPC will maintain security oversight for all non-SAR material. For special access requirements, SMC/CZE at Los Angeles Air Force Base CA will maintain security oversight.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL

BETTIE STEELY

b. TITLE

CONTRACTING OFFICER

c. TELEPHONE (Include Area Code)

(937) 255-5252

d. ADDRESS (Include Zip Code)

AFRL/SNAR
Bldg 7
Wright-Patterson AFB OH 45433

e. SIGNATURE

Bettie L Steely

17. REQUIRED DISTRIBUTION

- ☒ a. CONTRACTOR
- ☒ b. SUBCONTRACTOR
- ☐ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
- ☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
- ☒ e. ADMINISTRATION CONTRACTING OFFICER
- ☒ f. OTHERS AS NECESSARY

ASC/SYSP

DD Form 254, DEC 90 (REVERSE) (EF-VI) (PerFORM PRO)

11 Aug 98 SM

F33615-97-D-1045/P00003

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GENERAL INTELLIGENCE MATERIAL/FOREIGN DISCLOSURE

1. **Special Requirements for General and Foreign Intelligence Material.** In addition to the requirements and controls for classified material, the Director, Central Intelligence, sets up additional requirements and controls for intelligence in the possession of contractors. The contractor must:

a. Maintain control of all intelligence materials released in his or her custody in accordance with DOD 5220.22-M, the National Industrial Security Program Operating Manual (NISPOM), January 1995, paragraphs 5-200, 201 and 202 for control. Contractors agree that all intelligence material released, all reproductions and other material generated (including reproductions) are the property of the US Government.

b. Maintain control of all reproduced intelligence data in the same manner as the original.

c. Destroy intelligence materials in accordance with approved methods identified in the NISPOM.

d. Restrict access to those individuals with a valid need-to-know who are actually providing services under the contract. Further dissemination to other contractors, subcontractors, or other government agencies and private individuals or organization is prohibited unless authorized in writing by the Contracting Officer's Representative (COR) with prior approval of ASC/NAIC/POA.

e. Not release intelligence data to foreign nationals or immigrant aliens, regardless of their security clearance or contract status, without advance written permission from the COR, Foreign Disclosure Policy Office (ASC/SYSR), and ASC/NAIC/POA.

f. Ensure that each employee having access to intelligence material is fully aware of the special security requirements for this material.

2. **Returning Intelligence to the Air Force.** Contractors must return intelligence data to the COR at the termination or completion of a contract unless the COR has provided written approval for the contractor to retain for an additional two years. If retention is required beyond the two year period, the contractor must again request and receive written retention authority from the COR. If the COR grants retention authority, he or she must provide a copy of the written approval to ASC/NAIC/POA.

3. **Release of Classified and Unclassified Information to Foreign Government and Their Representatives.** Any military activity or defense contractor receiving a request from a foreign government or a representative thereof, for intelligence data about this program, shall forward the request to ASC/SYSR and ASC/NAIC/POA. Information released under Foreign Military Sales (FMS) must comply with the specific USAF disclosure guidance issued for the specific FMS customer.

21 August 1996

USE OF SPECIAL INTELLIGENCE MARKINGS1. Authorized Control Markings of Intelligence Information

a. "Dissemination and Extraction of Information Controlled by Originator (ORCON)".

This marking is used only on classified intelligence that clearly identifies or would reasonably permit ready identification of intelligence sources or methods that are particularly susceptible to countermeasures that would nullify or measurably reduce their effectiveness. It is used to enable the originator to maintain continuing knowledge and supervision of the further use of intelligence beyond the original dissemination. This control marking may not be used when an item of information will reasonably be protected by use of any other markings specified herein, or by the application of the "need-to-know" principle and safeguarding procedures of the security classification system.

b. "Not Releasable to Foreign Nationals (NOFORN)".

This control marking is used to identify classified intelligence material that may not be released in any form to foreign governments, foreign nationals, or non-US citizens without permission of the US Government originator, and then only when released in compliance with the National Disclosure Policy.

c. "Authorized for Release to (Name of country(ies)/international organization"

This marking is used to identify classified intelligence material that the US Government Originator has predetermined to be releasable or has been released through established foreign disclosure channels to the indicated country(ies) or organization.

2. Procedures Governing Use of Control Markings

a. Any recipient desiring to use intelligence in a manner contrary to the restrictions established by the control markings set forth above, shall obtain the advanced permission of the originating agency. Such permission applies only to the specific purposes agreed to by the originator and does not automatically apply to all recipients. Originator will ensure that prompt consideration is given to recipients' requests, with particular attention to reviewing and editing if necessary, sanitized or paraphrased versions to derive a text suitable for release subject to lesser or no control markings.

b. The control markings authorized above shall be shown on the title page, front cover, and other applicable pages of documents, incorporated in the text of electrical communications, shown on graphics, and associated (in full or abbreviated form) with data stored or processed in automatic data processing systems. The control markings also shall be indicated by parenthetical use of the markings abbreviations at the beginning or end of the appropriate portions. If the control markings apply to several or all portions, the document may be marked with a statement to this effect rather than marking each portion individually.

c. The control markings in paragraph one (1) shall be individually assigned at the time of preparation of intelligence products and used in conjunction with security classifications and other markings specified by EO 12958 and its implementing ISOO Directive. The markings shall be carried forward to any new format in which the same information is incorporated including oral and visual presentations.

FOR OFFICIAL USE ONLY (FOUO)

The following procedures will be used to protect FOR OFFICIAL USE ONLY (FOUO) information.

1. **HANDLING:** Access to FOUO material shall be limited to those employees who need the material to do their jobs. The FOR OFFICIAL USE ONLY marking is assigned to information when created by a DoD User Agency. FOR OFFICIAL USE ONLY is not a classification, but requires extra precautions to ensure it is not released to the public.
2. **MARKING:**
 - a. Mark an unclassified document containing FOUO information "FOR OFFICIAL USE ONLY" at the bottom of each page containing FOUO information and on the bottom of the front page or front cover (if any) and on the back of the last page and on the back cover (if any).
 - b. In a classified document, mark:
 - (1) An individual paragraph that contains FOUO, but not classified information, by placing "(FOUO)" at the beginning of the paragraph.
 - (2) The top and bottom of each page that has both FOUO and classified information, with the highest security classification of the information on that page.
 - (3) "FOUO" at the bottom of each page that has FOUO information but is not classified.
 - (4) If a classified document also contains FOUO information or if the classified material becomes FOUO when declassified, place the following statement on the bottom of the cover or the first page, under the classification marking: "NOTE: If declassified, review the document to make sure material is not FOUO and not exempt under AFI 37-131 before public release."
 - c. Mark other records, such as computer print outs, photographs, films, tapes, or slide "FOR OFFICIAL USE ONLY" so that the recorder or viewer knows the record contains FOUO information.
 - d. Mark each part of a message that contains FOUO information. Unclassified messages containing FOUO information must show the abbreviation "FOUO" before the text begins.
 - e. Make sure that documents that transmit FOUO materials call attention to any FOUO attachments.
3. **STORAGE:** To safeguard FOR OFFICIAL USE ONLY records during normal duty hours, place them in an out-of-sight location if your work area is accessible to persons who do not have a valid need for the information. After normal duty hours, store FOUO records to prevent unauthorized access. File them with other unclassified records in unlocked files or desks when normal internal building security is provided. When there is no internal security, locked buildings or rooms usually provide adequate after-hours protection. For additional protection, store FOUO material in locked containers such as file cabinets, desks, or bookcases. Expenditure of funds for security containers or closed areas solely for the protection of FOUO data is prohibited.
4. **TRANSMISSION:** FOUO material shall be transmitted by the same methods as other UNCLASSIFIED material. Discussion of FOUO material on the telephone is authorized if necessary for performance of the contract. FOUO information may be transmitted over telephone lines in digital form, by telecopies, or by other commercial teletype lines without encryption.
5. **RELEASE:** FOUO information may be released only to DoD components, officials of DoD component, and other DoD contractors when needed to conduct official DoD business.
6. **DESTRUCTION:** When no longer needed, FOUO information may be disposed of by any method which will preclude its disclosure to unauthorized individuals.

EMISSION SECURITY (EMSEC) REQUIREMENTS (FORMERLY TEMPEST REQUIREMENTS)

EMISSIONS SECURITY ASSESSMENT REQUEST (ESAR)

FOR ALL CLASSIFIED SYSTEMS

1. The contractor shall ensure that compromising emanations (EMSEC) conditions related to this contract are minimized.
2. The contractor shall provide countermeasure assessment data to the Contracting Officer (CO), in the form of an ESAR. The ESAR shall provide only specific responses to the data required in paragraph 3 below. The contractor's standard security plan shall NOT be used as a "stand-alone" ESAR response. The contractor shall NOT submit a detailed facility analysis/assessment. The ESAR information will be used to complete an EMSEC Countermeasures Assessment Review of the contractor's facility to be performed by the government EMSEC authority using current Air Force EMSEC directives. EMSEC is applied on a case-by-case basis and further information may be required to complete the review. The contractor shall provide this information to the CO when requested. After the evaluation of the ESAR by the government EMSEC authority, additional EMSEC requirements may be necessary. When changes to the information required in paragraph 3 below occurs (including, but not limited to, relocation, additions, or deletions of equipment from the original approved room), the contractors shall notify the CO of these changes. Upon request, the contractor shall submit to the CO a new ESAR identifying the new configuration at least 30 days before the change occurs. The contractor shall NOT commence processing with the new configuration until receiving, as a minimum, interim approval from the CO.
3. *ESAR contents shall include, as a minimum, the following information:
 - a. The specific classification and special categories of material to be processed/handled by electronic means. Include percentage of each classification level used including unclassified (i.e., 5% Top Secret, 10% Secret/SAR, 25% Secret, 65% Unclassified).
 - b. The specific location (complete address, building/room number, or office) where classified processing will be performed. Include identification of any other contractor/company located within 200 meters of the facility.
 - c. Attach a copy of the Defense Investigative Service (DIS) Form 147 to validate physical security and approved storage level of the facility.
 - d. Provide the name, title, and telephone number (commercial and/or DSN) of a point of contact at the facility where processing will occur.
4. The prime contractor shall ensure that all subcontractors and/or vendors comply with EMSEC requirements when performing classified processing related to this contract. The subcontractor will provide the above documentation through their prime to the CO to complete the ESAR.

(NOTE: A copy of your Automated Information System Security Plan(s) (AISSP) will suffice.

8 April 1998

The following is paragraph 3.6, extracted from AFSSM 7011, 1 July 1996.

3.6. Special Items. People may innocently introduce other radio devices, such as pagers, hand-held portable transceiver radios, cellular telephones, cordless telephones, and cordless microphones into the area processing classified information with disastrous results. Also, alarm systems may use radio transmitters to alert remotely located security or fire-fighting teams.

3.6.1. Hand-Held Radios. Hand-held radio transceivers used with intrabase radios (IBR) and land-mobile radios (LMR) deserve special consideration because of their unique operational applications. A person may carry these devices into an area where you process classified information. If the person carrying such a device works in the facility, either turn off the device and use the telephone or separate it 2 meters from classified processors; no transmissions are allowed. If the person carrying the device is a short-term visitor, it is not necessary to turn off the radio because the visitor usually moves about in the facility. Infrequent transmissions are allowed, but only for short durations.

3.6.2. Beepers and Pagers. Beepers and pagers deserve special consideration because of their unique operational applications. A person may carry these devices into an area where classified information is processed. If the person carrying such a device works in the facility, either turn off the device and use the telephone or keep the device 2 meters from classified processors. If the person carrying the device is a short-term visitor, it is not necessary to turn off the device because the visitor usually moves about in the facility. If the device has a transmit capability, follow the instructions for hand-held radios.

3.6.3. Cellular Telephones. Using a cellular telephone in an area where classified information is processed is a serious hazard. When the cellular telephone is used as an operational necessity, handle as a hand-held radio according to paragraph 3.6.1. When the cellular telephone is a personal asset, its use is prohibited. Disable the unit from receiving calls or keep the unit outside the area.

3.6.4. Cordless Telephones and Cordless Microphones. Using cordless telephones in an area where classified information is processed is a hazard; their use is prohibited. Using cordless microphones for classified briefings is a hazard; their use is prohibited.

3.6.5. Alarm Systems. The mode of operation of alarm systems transmitters will determine their treatment. Any such transmitter with a continuous transmit mode or a high duty cycle (transmits most of the time) must meet the same separation requirements as all other fixed transmitters. If they do not meet these requirements, exclude them from operating in the classified information processing area. Low duty cycle (transmits short bursts infrequently) systems are not considered hazards and require no special treatment.

The complete document can be obtained from the Air Force Information Protection Home Page (<http://www.afca.scott.af.mil/gc/gci/>).

SENSITIVE COMPARTMENTED INFORMATION CLAUSES
(SCIF NOT REQUIRED)

The following controls will apply to Sensitive Compartmented Information (SCI) provided under this contract:

1. Item 14: USAFINTEL 201-1, DOD TS-5105.21-M-1, DCID 1/14 and 1/21, and DIAM 50-5 provide the necessary guidance for EMSEC (emission security), physical, personnel and information security measures and is part of the SCI security specifications for the contract.
2. Item 15: This contract requires access to SCI. The National Air Intelligence Center (NAIC) Special Security Office (SSO) has exclusive security responsibility for all SCI released to the contractor or developed under this contract. The Defense Intelligence Agency (DIA), or its designee, shall be responsible for all inspections of the contractor to insure compliance with SCI Directives/Regulations. All SCI will be handled in accordance with security requirements furnished by the Aeronautical System Center (ASC) SSO, located in ASC/CVS.
3. SCI will not be released to contractor employees without the specific release approval by the originator of the material as outlined in the governing directives and based on prior approval and certification of "need to-know" by the contract monitor, Denise J. Jacobs, AFRL SNAR
(937) 255-4854 x 4160.
4. Names of contractor personnel requiring access to SCI and justification for SCI billets will be submitted to the ASC SSO after contract monitor approval/concurrence. Upon receipt of written approval from the contract monitor, the Contractor Special Security Officer (CSSO) may submit the necessary forms to DISCO for a Single Scope Background Investigation (SSBI) for those personnel nominated for SCI access in accordance with the National Industrial Security Program Operating Manual (NISPOM).
5. Inquiries pertaining to classification guidance on SCI will be directed to the contract monitor listed in 3 above.
6. All SCI furnished to the contractor in support of this contract remains the property of the Department of Defense, or the agency or command that releases it. Upon completion or cancellation of the contract, SCI furnished will be returned to the NAIC SSO.
7. This contract requires that 2 SCI contract billets be established in order to fulfill the contractual obligations incurred. Access will be granted by the sponsoring government agency. Upon completion or cancellation of the contract, the CSSO will debrief all personnel not required for contract close-out and those billets will be disestablished.
8. Access will be granted only at the sponsoring agency and other accredited SCI Facilities (SCIF) as approved by the government Contract Monitor..

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1.
2. PROC INSTRUMENT ID NO. (PIN)		3. SPIN	4. EFFECTIVE DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	PAGE 1 OF 2
F33615-97-D-1045		P00002	MAIL DATE		6. BOC/DMS RATING
7. ISSUED BY USAF/AFMC/ASC WRIGHT LABORATORY AFRL/SNKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-5252		CODE FA8650	8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST., SUITE 200 SAN DIEGO, CA 92111-2241 PAS: NONE		CODE S0514A
9. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS		CODE 65409	FACILITY CODE IF "Y" FOR MULTIPLE FACILITIES SEE SECT "Y"		10. SECURITY CLASS U
		MAILING DATE JUN 24 1998		11. DISCOUNT FOR PROMPT PAYMENT 1. 2% DAYS NET 30 2. NO % DAYS OTHER IF "Y" SEE SECT "E" 3. RO % DAYS	
				12. PURCHASE OFFICE POINT OF CONTACT LSW/L11/LSW	
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS <input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. Offer must acknowledge receipt of this amendment prior to the hour and date specified in this solicitation, or as amended by one of the following methods: (a) By signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment in each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.					
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS <input type="checkbox"/> THIS CHANGE IS ISSUED PURSUANT TO THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER. <input type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN. <input checked="" type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO MUTUAL AGREEMENT OF THE PARTIES & FAR 43.103(a) (3). <input type="checkbox"/> THIS MODIFICATION IS ISSUED PURSUANT TO _____					
15. CONTRACT ADMINISTRATION DATA A. KIND OF MOD B. MOD ABST RECIPIENT ADP FT C. DATE OF SIGNATURE MODIFICATION D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-) E. LOSING POC/CO ON TRANSFER F. GAINING POC/CO ON TRANSFER G. SVC/AGENCY USE B					
16. ENTER ANY APPLICABLE CHANGES A. PAY CODE B. EFFECTIVE DATE OF AWARD C. CONTRACT (1) TYPE (2) KIND D. TYPE CONTR E. SURV CRIT F. SPL CONTR PROVISIONS G. PAYING OFC CODE H. DATE SIGNED I. SECURITY (1) CLASS (2) DAT OF DD 354 TS 98JUN16					
17. REMARKS: Except as provided herein, all items and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect. SUBJECT: INCORPORATION OF A REVISED DD FORM 254 PROJECT ENGINEER: LYDIA HARRIS, AFRL/SNAR, (937) 255-4854 EXT 4186 FINANCE OFFICE: DFAS-CO/SANTA ANA, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: SC1006)					
18. <input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 1 COPIES TO ISSUING OFFICE					
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign) <i>Donald Van Duker</i>		22. UNITED STATES OF AMERICA (Signature of Contracting Officer) <i>Bettie L. Stealy</i>			
20. NAME AND TITLE OF SIGNER (Type or print) J.D. Van Duker, Contracts Mgr		21. DATE SIGNED 22-Jun-98		23. NAME OF CONTRACTING OFFICER (Type or print) BETTIE L. STEALY	
				24. DATE SIGNED 22 Jun 98	

1. Pursuant to MUTUAL AGREEMENT OF THE PARTIES, and FAR 43.103(a)(3), the above numbered contract is hereby amended to reflect INCORPORATION OF A REVISED DD FORM 254.
2. Section J - List of Documents, Exhibits, and Other Attachments, Attachment #2, Contract Security Classification (DD Form 254), dated 97NOV18 is hereby superseded by the attached DD Form 254, dated 98JUN16.
3. This Supplemental Agreement constitutes a full settlement of any changes of the contractor arising out of, or connected with, the changes affected hereby.

**DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION SPECIFICATION**

*(The requirements of the DoD Industrial Security Manual apply
to all security aspects of this effort)*

1. CLEARANCE AND SAFEGUARDING

a. FACILITY CLEARANCE REQUIRED

TOP SECRET

b. LEVEL OF SAFEGUARDING REQUIRED

TOP SECRET

2. THIS SPECIFICATION IS FOR: (X and complete as applicable)

<input checked="" type="checkbox"/> a. PRIME CONTRACT NUMBER F33615-97-D-1045	Exp. Date: 02 11 11
b. SUBCONTRACT NUMBER	
c. SOLICITATION OR OTHER NUMBER	DUE Date (YYMMDD)

3. THIS SPECIFICATION IS: (X and complete as applicable)

a. ORIGINAL (Complete date in all cases)	Date (YYMMDD) 97 10 17
<input checked="" type="checkbox"/> b. REVISED (Supersedes all previous specs)	Revision No. 01 Date (YYMMDD) 98 06 17
c. FINAL (Complete item 5 in all cases)	

4. IS THIS A FOLLOW-ON CONTRACT?

☐ YES

☒ NO

If Yes, complete the following:

Classified material received or generated under:

(Preceding Contract Number) is transferred to this follow-on contract

5. IS THIS A FINAL DD FORM 254?

☐ YES

☒ NO

If Yes, complete the following:

In response to the contractor's requested dated:

, retention of the identified classified material is authorized for the period of:

6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)

a. NAME, ADDRESS, AND ZIP CODE TRW AVIONICS & SURVEILLANCE GROUP P. O. Box 289000 San Diego, CA 92128-9000	b. CAGE CODE 65409	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) Defense Security Service Industrial Security FO (S53SD) 16885 W. Bernardo Dr., Ste 150 San Diego, CA 92127
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7. SUBCONTRACTOR

a. NAME, ADDRESS, AND ZIP CODE NA	b. CAGE CODE NA	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) NA
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8. ACTUAL PERFORMANCE

a. LOCATION TRW, Inc 1900 Founders Drive, Suite 202 Kettering, OH 45420-4011	b. CAGE CODE 8T321	c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code) Defense Security Service Industrial Security FO (S11DY) 2900 Presidential Drive Suite 340 Fairborn, OH 45324-0628
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9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

This technical effort will focus on the development and demonstration of technology to enable cost-effective evaluations/demonstrations of advanced avionics architectures; and define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems.

10. THIS CONTRACT WILL REQUIRE ACCESS TO:		YES	NO	11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:		YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION		<input checked="" type="checkbox"/>		a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY			<input checked="" type="checkbox"/>
b. RESTRICTED DATA			<input checked="" type="checkbox"/>	b. RECEIVE CLASSIFIED DOCUMENTS ONLY			<input checked="" type="checkbox"/>
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION			<input checked="" type="checkbox"/>	c. RECEIVE AND GENERATE CLASSIFIED MATERIAL		<input checked="" type="checkbox"/>	
d. FORMERLY RESTRICTED DATA		<input checked="" type="checkbox"/>		d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE			<input checked="" type="checkbox"/>
e. INTELLIGENCE INFORMATION				e. PERFORM SERVICES ONLY			<input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (SCI)		<input checked="" type="checkbox"/>		f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES			<input checked="" type="checkbox"/>
(2) Non-SCI		<input checked="" type="checkbox"/>		g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER		<input checked="" type="checkbox"/>	
f. SPECIAL ACCESS INFORMATION			<input checked="" type="checkbox"/>	h. REQUIRE A COMSEC ACCOUNT		<input checked="" type="checkbox"/>	
g. NATO INFORMATION		<input checked="" type="checkbox"/>		i. HAVE TEMPEST REQUIREMENTS		<input checked="" type="checkbox"/>	
h. FOREIGN GOVERNMENT INFORMATION		<input checked="" type="checkbox"/>		j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS			<input checked="" type="checkbox"/>
i. LIMITED DISSEMINATION INFORMATION			<input checked="" type="checkbox"/>	k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE		<input checked="" type="checkbox"/>	
l. FOR OFFICIAL USE ONLY INFORMATION		<input checked="" type="checkbox"/>		l. OTHER (Specify) Notification of Government Security Activity is required.		<input checked="" type="checkbox"/>	
m. OTHER (Specify)							

12. **PUBLIC RELEASE.** Any information classified or unclassified pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify):

ASC/PA Bldg 14
1865 4th Street Suite 15
WPAFB OH 45433-6508

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs) for review.
In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. **SECURITY GUIDANCE.** The security classification guidance need for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation at this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guidelines/contracts reference herein. Add additional pages as needed to provide complete guidance.)

- a. Ref Blk 10a: COMSEC and/or cryptographic requirements apply. See DoD 5220.22-S for details.
- b. Ref Blk 10e(1): SCI requirements apply. See Addendum.
- c. Ref Blk 10e(2): General Intelligence Material/Foreign Disclosure applies. See Addendum.
- d. Ref Blk 10j: For Official Use Only (FOUO) applies. See Addendum.
- d. Ref Block 11c: Any classified information generated in the performance of this contract shall require the contractor to apply derivative classification and markings consistent with the source material. The use of cellular telephones, hand held radios, beepers/pagers, cordless telephones and cordless microphones in a computer facility where classified processing is accomplished requires special consideration. These considerations are outlined in (U) Air Force System Security Memo (AFSSM) 7011, 1 July 1996, para 3.6. See addendum.
- e. Ref Blk 11i: EMSEC requirements apply. For on-base performance EMSEC requirements are incumbent on the Government.
- f. Ref Blk 11k: DCS address is HQ Defense Courier System, Bldg P-830, Ft. George G. Meade MD, 20755-5370.
- g. Ref Block 11l: The Notification of Government Security Activity and Visitor Group Security Agreement clause applies. See contract clause in Section I for details.
- h. Ref Blk 11l: On-base performance in Area B, Bldg 620, WPAFB OH 45433-7334.
- i. Transfer of documents to other IR&D efforts is not permitted.
- j. The National Industrial Security Program Operating Manual (NISPOM), Jan 95, applies.
- k. Program Manager: Lydia M. Harris, AFRL/SNAR, 255-4854, extension 4186.
- l. Ref Blk 1b: The prime contractor will not require a Top Secret safeguarding capability. The subcontractor will safeguard all Top Secret material under this contract, which they will receive directly from the Government.

14. **ADDITIONAL SECURITY REQUIREMENTS.** Requirements, in addition to ISM requirements, are established for this contract. If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.

☒ Yes ☐ No

Ref Blk 10e(1) SCI requirements apply. See addendum.

15. **INSPECTIONS.** Elements of this contract are outside the inspection responsibility of the cognizant security office. If Yes, identify specific areas or persons covered and the activity responsible for inspections. Use Item 13 if additional space is needed.

☒ Yes ☐ No

Prime contractor performance will occur at Wright-Patterson Air Force Base Ohio, with the exception of a small percentage of work which will be done at the contractor's facility. DSS is relieved of all inspection responsibility for prime contractor performance on the installation. ASC/SYSPC will maintain security oversight.

16. **CERTIFICATION AND SIGNATURE.** Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL

Bettie Steely

b. TITLE

Contracting Officer

c. TELEPHONE (Include Area Code)

(937) 255-5252

d. ADDRESS (Include Zip Code)

AFRL/SNK
Bldg 7
Wright-Patterson AFB OH 45433

e. SIGNATURE

Bettie L. Steely

ASC/SYS
COORDINATION
PC-ONLY

17. REQUIRED DISTRIBUTION

- ☒ a. CONTRACTOR
- ☒ b. SUBCONTRACTOR
- ☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
- ☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
- ☐ e. ADMINISTRATION CONTRACTING OFFICER
- ☒ f. OTHERS AS NECESSARY

DD Form 254, DEC 90 (REVERSE) (EF-VI) (PerFORM PRO)

F33615-97-D-1045, P00002

Section J, ATCH #2

Page 2 of 8



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

MEMORANDUM FOR ASC/CVS

FROM: ASC/SYSIC

SUBJECT: DD Form 254 Review *F33615-97-D-1045*

The attached DD Form 254 is forwarded for review by your office for compliance with Sensitive Compartmented Information access requirements. Following your review, please annotate the appropriate statements and return this letter and the DD Form 254 to ASC/SYSIC.

Linda L. Nicholson

LINDA L. NICHOLSON
Chief, Classification Management Section
Material Security Division

Attachment:
DD Form 254

1st Ind, ASC/CVS

TO: ASC/SYSIC

We have reviewed the attached DD Form 254.



- a. The Contract Monitor:
 - ☒ Has SCI access.
 - ☐ Does not have SCI access.
- b. Billets:
 - ☒ Are available.
 - ☐ Are not available.
- c. Review for SCI requirements determined:
 - ☒ Is approved as written.
 - ☐ Is approved, provided changes are made as indicated on the DD Form 254.
 - ☐ Is disapproved. We recommend that it be completely rewritten in accordance with the guidance provided in the "ASC Handbook for Preparing DD Form 254," December 1995.

William R. Bohaboy

WILLIAM R. BOHABOY, GS-13, DAF
Chief, Special Security Office

25 February 1997

SENSITIVE COMPARTMENTED INFORMATION CLAUSES
(SCIF NOT REQUIRED)

The following controls will apply to Sensitive Compartmented Information (SCI) provided under this contract:

1. Item 14: USAFINTTEL 201-1, DOD TS-5105.21-M-1, DCID 1/14 and 1/21, and DIAM 50-5 provide the necessary guidance for EMSEC (emission security), physical, personnel and information security measures and is part of the SCI security specifications for the contract.
2. Item 15: This contract requires access to SCI. The National Air Intelligence Center (NAIC) Special Security Office (SSO) has exclusive security responsibility for all SCI released to the contractor or developed under this contract. The Defense Intelligence Agency (DIA), or its designee, shall be responsible for all inspections of the contractor to insure compliance with SCI Directives/Regulations. All SCI will be handled in accordance with security requirements furnished by the Aeronautical System Center (ASC) SSO, located in ASC/CVS.
3. SCI will not be released to contractor employees without the specific release approval by the originator of the material as outlined in the governing directives and based on prior approval and certification of "need to-know" by the contract monitor, Denise J. Jacobs, AFRL SNAR (932) 255-4854 x 4160.
4. Names of contractor personnel requiring access to SCI and justification for SCI billets will be submitted to the ASC SSO after contract monitor approval/concurrence. Upon receipt of written approval from the contract monitor, the Contractor Special Security Officer (CSSO) may submit the necessary forms to DISCO for a Single Scope Background Investigation (SSBI) for those personnel nominated for SCI access in accordance with the National Industrial Security Program Operating Manual (NISPOM).
5. Inquiries pertaining to classification guidance on SCI will be directed to the contract monitor listed in 3 above.
6. All SCI furnished to the contractor in support of this contract remains the property of the Department of Defense, or the agency or command that releases it. Upon completion or cancellation of the contract, SCI furnished will be returned to the NAIC SSO.
7. This contract requires that / SCI contract billets be established in order to fulfill the contractual obligations incurred. Access will be granted by the sponsoring government agency. Upon completion or cancellation of the contract, the CSSO will debrief all personnel not required for contract close-out and those billets will be disestablished.
8. Access will be granted only at the sponsoring agency and other accredited SCI Facilities (SCIF) as approved by the government Contract Monitor.

GENERAL INTELLIGENCE MATERIAL/FOREIGN DISCLOSURE

1. **Special Requirements for General and Foreign Intelligence Material.** In addition to the requirements and controls for classified material, the Director, Central Intelligence, sets up additional requirements and controls for intelligence in the possession of contractors. The contractor must:

a. Maintain control of all intelligence materials released in his or her custody in accordance with DOD 5220.22-M, the National Industrial Security Program Operating Manual (NISPOM), January 1995, paragraphs 5-200, 201 and 202 for control. Contractors agree that all intelligence material released, all reproductions and other material generated (including reproductions) are the property of the US Government.

b. Maintain control of all reproduced intelligence data in the same manner as the original.

c. Destroy intelligence materials in accordance with approved methods identified in the NISPOM.

d. Restrict access to those individuals with a valid need-to-know who are actually providing services under the contract. Further dissemination to other contractors, subcontractors, or other government agencies and private individuals or organization is prohibited unless authorized in writing by the Contracting Officer's Representative (COR) with prior approval of ASC/NAIC/POA.

e. Not release intelligence data to foreign nationals or immigrant aliens, regardless of their security clearance or contract status, without advance written permission from the COR, Foreign Disclosure Policy Office (ASC/SYSR), and ASC/NAIC/POA.

f. Ensure that each employee having access to intelligence material is fully aware of the special security requirements for this material.

2. **Returning Intelligence to the Air Force.** Contractors must return intelligence data to the COR at the termination or completion of a contract unless the COR has provided written approval for the contractor to retain for an additional two years. If retention is required beyond the two year period, the contractor must again request and receive written retention authority from the COR. If the COR grants retention authority, he or she must provide a copy of the written approval to ASC/NAIC/POA.

3. **Release of Classified and Unclassified Information to Foreign Government and Their Representatives.** Any military activity or defense contractor receiving a request from a foreign government or a representative thereof, for intelligence data about this program, shall forward the request to ASC/SYSR and ASC/NAIC/POA. Information released under Foreign Military Sales (FMS) must comply with the specific USAF disclosure guidance issued for the specific FMS customer.

21 August 1996

USE OF SPECIAL INTELLIGENCE MARKINGS1. Authorized Control Markings of Intelligence Information

a. "Dissemination and Extraction of Information Controlled by Originator (ORCON)".

This marking is used only on classified intelligence that clearly identifies or would reasonably permit ready identification of intelligence sources or methods that are particularly susceptible to countermeasures that would nullify or measurably reduce their effectiveness. It is used to enable the originator to maintain continuing knowledge and supervision of the further use of intelligence beyond the original dissemination. This control marking may not be used when an item of information will reasonably be protected by use of any other markings specified herein, or by the application of the "need-to-know" principle and safeguarding procedures of the security classification system.

b. "Not Releasable to Foreign Nationals (NOFORN)"

This control marking is used to identify classified intelligence material that may not be released in any form to foreign governments, foreign nationals, or non-US citizens without permission of the US Government originator, and then only when released in compliance with the National Disclosure Policy.

c. "Authorized for Release to (Name of country(ies)/International organization"

This marking is used to identify classified intelligence material that the US Government Originator has predetermined to be releasable or has been released through established foreign disclosure channels to the indicated country(ies) or organization.

2. Procedures Governing Use of Control Markings

a. Any recipient desiring to use intelligence in a manner contrary to the restrictions established by the control markings set forth above, shall obtain the advanced permission of the originating agency. Such permission applies only to the specific purposes agreed to by the originator and does not automatically apply to all recipients. Originator will ensure that prompt consideration is given to recipients' requests, with particular attention to reviewing and editing if necessary, sanitized or paraphrased versions to derive a text suitable for release subject to lesser or no control markings.

b. The control markings authorized above shall be shown on the title page, front cover, and other applicable pages of documents, incorporated in the text of electrical communications, shown on graphics, and associated (in full or abbreviated form) with data stored or processed in automatic data processing systems. The control markings also shall be indicated by parenthetical use of the markings abbreviations at the beginning or end of the appropriate portions. If the control markings apply to several or all portions, the document may be marked with a statement to this effect rather than marking each portion individually.

c. The control markings in paragraph one (1) shall be individually assigned at the time of preparation of intelligence products and used in conjunction with security classifications and other markings specified by EO 12958 and its implementing ISCO Directive. The markings shall be carried forward to any new format in which the same information is incorporated including oral and visual presentations.

FOR OFFICIAL USE ONLY (FOUO)

The following procedures will be used to protect FOR OFFICIAL USE ONLY (FOUO) information.

1. **HANDLING:** Access to FOUO material shall be limited to those employees who need the material to do their jobs. The FOR OFFICIAL USE ONLY marking is assigned to information when created by a DoD User Agency. FOR OFFICIAL USE ONLY is not a classification, but requires extra precautions to ensure it is not released to the public.

2. **MARKING:**

- a. Mark an unclassified document containing FOUO information "FOR OFFICIAL USE ONLY" at the bottom of each page containing FOUO information and on the bottom of the front page or front cover (if any) and on the back of the last page and on the back cover (if any).
- b. In a classified document, mark:
 - (1) An individual paragraph that contains FOUO, but not classified information, by placing "(FOUO)" at the beginning of the paragraph.
 - (2) The top and bottom of each page that has both FOUO and classified information, with the highest security classification of the information on that page.
 - (3) "FOUO" at the bottom of each page that has FOUO information but is not classified.
 - (4) If a classified document also contains FOUO information or if the classified material becomes FOUO when declassified, place the following statement on the bottom of the cover or the first page, under the classification marking: "NOTE: If declassified, review the document to make sure material is not FOUO and not exempt under AFI 37-131 before public release."
- c. Mark other records, such as computer print outs, photographs, films, tapes, or slide "FOR OFFICIAL USE ONLY" so that the receiver or viewer knows the record contains FOUO information.
- d. Mark each part of a message that contains FOUO information. Unclassified messages containing FOUO information must show the abbreviation "FOUO" before the text begins.
- e. Make sure that documents that transmit FOUO materials call attention to any FOUO attachments.

3. **STORAGE:** To safeguard FOR OFFICIAL USE ONLY records during normal duty hours, place them in an out-of-sight location if your work area is accessible to persons who do not have a valid need for the information. After normal duty hours, store FOUO records to prevent unauthorized access. File them with other unclassified records in unlocked files or desks when normal internal building security is provided. When there is no internal security, locked buildings or rooms usually provide adequate after-hours protection. For additional protection, store FOUO material in locked containers such as file cabinets, desks, or bookcases. Expenditure of funds for security containers or closed areas solely for the protection of FOUO data is prohibited.

4. **TRANSMISSION:** FOUO material shall be transmitted by the same methods as other UNCLASSIFIED material. Discussion of FOUO material on the telephone is authorized if necessary for performance of the contract. FOUO information may be transmitted over telephone lines in digital form, by telecopies, or by other commercial teletype lines without encryption.

5. **RELEASE:** FOUO information may be released only to DoD components, officials of DoD component, and other DoD contractors when needed to conduct official DoD business.

6. **DESTRUCTION:** When no longer needed, FOUO information may be disposed of by any method which will preclude its disclosure to unauthorized individuals.

The following is paragraph 3.6, extracted from AFSSM 7011, 1 July 1996.

3.6. Special Items. People may innocently introduce other radio devices, such as pagers, hand-held portable transceiver radios, cellular telephones, cordless telephones, and cordless microphones into the area processing classified information with disastrous results. Also, alarm systems may use radio transmitters to alert remotely located security or fire-fighting teams.

3.6.1. Hand-Held Radios. Hand-held radio transceivers used with intrabase radios (IBR) and land-mobile radios (LMR) deserve special consideration because of their unique operational applications. A person may carry these devices into an area where you process classified information. If the person carrying such a device works in the facility, either turn off the device and use the telephone or separate it 2 meters from classified processors; no transmissions are allowed. If the person carrying the device is a short-term visitor, it is not necessary to turn off the radio because the visitor usually moves about in the facility. Infrequent transmissions are allowed, but only for short durations.

3.6.2. Beepers and Pagers. Beepers and pagers deserve special consideration because of their unique operational applications. A person may carry these devices into an area where classified information is processed. If the person carrying such a device works in the facility, either turn off the device and use the telephone or keep the device 2 meters from classified processors. If the person carrying the device is a short-term visitor, it is not necessary to turn off the device because the visitor usually moves about in the facility. If the device has a transmit capability, follow the instructions for hand-held radios.

3.6.3. Cellular Telephones. Using a cellular telephone in an area where classified information is processed is a serious hazard. When the cellular telephone is used as an operational necessity, handle as a hand-held radio according to paragraph 3.6.1. When the cellular telephone is a personal asset, its use is prohibited. Disable the unit from receiving calls or keep the unit outside the area.

3.6.4. Cordless Telephones and Cordless Microphones. Using cordless telephones in an area where classified information is processed is a hazard; their use is prohibited. Using cordless microphones for classified briefings is a hazard, their use is prohibited.

3.6.5. Alarm Systems. The mode of operation of alarm systems transmitters will determine their treatment. Any such transmitter with a continuous transmit mode or a high duty cycle (transmits most of the time) must meet the same separation requirements as all other fixed transmitters. If they do not meet these requirements, exclude them from operating in the classified information processing area. Low duty cycle (transmits short bursts infrequently) systems are not considered hazards and require no special treatment.

The complete document can be obtained from the Air Force Information Protection Home Page (<http://www.afca.scott.af.mil/gc/gci/>).

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					1. PAGE 1 OF 2																			
2. PROCEEDING DOCUMENT ID NO. (PIIN)		3. SPIN	4. EFFECTIVE DATE	5. REQUISITION/PURCHASE REQUEST PROJECT NO.	6. BOCOMS RATING																			
F33615-97-D-1045		P00001	MAIL DATE																					
7. ISSUED BY USAF/AFMC/ASC WRIGHT LABORATORY WL/AAKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STEVEN L. WILLIS PHONE: (937) 255-2206			CODE FA8650	8. ADMINISTERED BY (IF OTHER THAN BLOCK 7) DCMC SAN DIEGO 7675 DAGGET ST., SUITE 200 SAN DIEGO, CA 92111-2241 PAS: NONE																				
9. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198 PHONE: (619) 592-3641 COUNTY: SAN DIEGO SEE SECTION G FOR PAYMENT ADDRESS			CODE 65409	FACILITY CODE	10. SECURITY CLASS. U																			
					11. DISCOUNT FOR PROMPT PAYMENT																			
					<table border="1"> <tr> <td>1</td> <td>ST</td> <td>%</td> <td>DAYS</td> <td>NET</td> <td>DAY</td> </tr> <tr> <td>2</td> <td>ND</td> <td>%</td> <td>DAYS</td> <td>OTHER</td> <td>IF</td> </tr> <tr> <td>3</td> <td>RD</td> <td>%</td> <td>DAYS</td> <td>SEE</td> <td>SECTION</td> </tr> </table>		1	ST	%	DAYS	NET	DAY	2	ND	%	DAYS	OTHER	IF	3	RD	%	DAYS	SEE	SECTION
1	ST	%	DAYS	NET	DAY																			
2	ND	%	DAYS	OTHER	IF																			
3	RD	%	DAYS	SEE	SECTION																			
					12. PURCHASE OFFICE POINT OF CONTACT LSW/L11/LSW																			
13. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS																								
<input type="checkbox"/> The above numbered solicitation is amended as set forth in block 17. <input type="checkbox"/> The hour and date specified for receipt of offers is extended <input type="checkbox"/> is not extended.																								
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended by one of the following methods: (a) by signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter provided such telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.																								
14. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS																								
<input type="checkbox"/> THE CHANGE IS ISSUED PURSUANT TO _____ THE CHANGES SET FORTH HEREIN ARE MADE TO THE ABOVE NUMBERED CONTRACT/ORDER.																								
<input checked="" type="checkbox"/> THE ABOVE NUMBERED CONTRACT IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATA, ETC.) SET FORTH HEREIN.																								
<input type="checkbox"/> THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO _____ IT MODIFIES THE ABOVE NUMBERED CONTRACT AS SET FORTH HEREIN.																								
<input type="checkbox"/> THE MODIFICATION IS ISSUED PURSUANT TO _____																								
15. CONTRACT ADMINISTRATION DATA																								
A. KIND OF MOD	B. MOD ABST RECIPIENT ADP PT	C. DATE OF SIGNATURE MODIFICATION	D. CHANGE IN CONTRACT AMOUNT INCREASE (+) DECREASE (-)	E. LOSING PO/CAO ON TRANSFER	F. GAINING PO/CAO ON TRANSFER	G. SVC/AGENCY USE																		
B																								
16. ENTER ANY APPLICABLE CHANGES																								
A. PAY CODE	B. EFFECTIVE DATE OF AWARD	C. CONTRACT (1) TYPE (2) KIND	D. TYPE CONTR	E. SURV CRIT	F. SPL CONTR PROVISIONS	G. PAYING OFC CODE																		
						H. DATE SIGNED																		
						I. SECURITY (1) CLASS (2) DAT OF DD 254																		
						97NOV18																		
17. REMARKS: Except as provided herein, all terms and conditions of the contract, as heretofore changed, remain unchanged and in full force and effect.																								
SUBJECT: ADMINISTRATIVE CHANGES TO THE DD FORM 254 PROJECT ENGINEER: LYDIA HARRIS, WL/AAST, (937) 255-4854 FINANCE OFFICE: DFAS-CO/SANTA ANA, P O BOX 182381 COLUMBUS OH 43218-2381 (CODE: SC1006)																								
18. <input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT <input type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN _____ COPIES TO ISSUING OFFICE																								
19. CONTRACTOR/OFFEROR (Signature of person authorized to sign)				22. UNITED STATES OF AMERICA (Signature of Contracting Officer)																				
				BY <i>Bettie L. Stealy</i>																				
20. NAME AND TITLE OF SIGNER (Type or print)			21. DATE SIGNED		23. NAME OF CONTRACTING OFFICER (Type or print)																			
					BETTIE L. STEALY																			
					24. DATE SIGNED																			
					17 Dec 97																			

1. Pursuant to FAR 52.204-2 SECURITY REQUIREMENTS (AUG 1996), the above numbered contract is hereby unilaterally amended to reflect ADMINISTRATIVE CHANGES TO THE DD FORM 254.

2. As a result of Paragraph 1 above, said contract is specifically modified by the following administrative changes as set forth below:

3. Section A - Cover Page is hereby amended as follows: Block 17.b., Date of DD 254 has been changed from "97OCT17" to "97NOV18".

4. Section J - List of Documents, Exhibits, and Other Attachments, Attachment #2, Contract Security Classification (DD Form 254), dated 97OCT17 is hereby superseded by the attached DD Form 254, dated 97NOV18. The administrative changes identified in this replacement DD Form 254 are located in the following blocks: 2.a., 2.c., 3.a., 3.b., 6.a., 6.c., and 13.a.

5. Except as noted above all terms and conditions of the contract remain unchanged.

**DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION SPECIFICATION**

(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort)

1. CLEARANCE AND SAFEGUARDING
a. FACILITY CLEARANCE REQUIRED
SECRET
b. LEVEL OF SAFEGUARDING REQUIRED
b NA

2. THIS SPECIFICATION IS FOR: *(X and complete as applicable)*

<input checked="" type="checkbox"/> a. PRIME CONTRACT NUMBER F33613-97-D-1045	Exp. Date: 021111
b. SUBCONTRACT NUMBER	
c. SOLICITATION OR OTHER NUMBER	DUE Date (YYMMDD)

3. THIS SPECIFICATION IS: *(X and complete as applicable)*

<input checked="" type="checkbox"/> a. ORIGINAL <i>(Complete date in all cases)</i>	Date (YYMMDD) 97 10 17
b. REVISED <i>(Supersedes all previous specs)</i>	Revision No. Date (YYMMDD)
c. FINAL <i>(Complete item 5 in all cases)</i>	

4. IS THIS A FOLLOW-ON CONTRACT?

☐ YES ☒ NO. If Yes, complete the following:

Classified material received or generated under _____ *(Preceding Contract Number)* is transferred to this follow-on contract.

5. IS THIS A FINAL DD FORM 254?

☐ YES ☒ NO. If Yes, complete the following:

In response to the contractor's requested dated _____, retention of the identified classified material is authorized for the period of _____

6. CONTRACTOR *(Include Commercial and Government Entity (CAGE) Code)*

a. NAME, ADDRESS, AND ZIP CODE TRW AVIONICS & SURVEILLANCE GROUP P.O. Box 289000 San Diego CA 92128-9000	b. CAGE CODE 65409	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> DIS/Director of Industrial Security 3605 Long Beach Blvd. Long Beach CA 90807-4013
--	------------------------------	--

7. SUBCONTRACTOR

a. NAME, ADDRESS, AND ZIP CODE NA	b. CAGE CODE NA	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> NA
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8. ACTUAL PERFORMANCE

a. LOCATION NA	b. CAGE CODE NA	c. COGNIZANT SECURITY OFFICE <i>(Name, Address, and Zip Code)</i> NA
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9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

The Avionics CNI Concepts Exploration (ACE) technical effort will focus on the development and demonstration of technology to enable cost-effective evaluations/demonstrations of advanced avionics architectures; and define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems.

10. THIS CONTRACT WILL REQUIRE ACCESS TO:

	YES	NO
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. RESTRICTED DATA	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. FORMERLY RESTRICTED DATA	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. INTELLIGENCE INFORMATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(1) Sensitive Compartmented Information (SCI)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Non-SCI	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. SPECIAL ACCESS INFORMATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. NATO INFORMATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. FOREIGN GOVERNMENT INFORMATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. LIMITED DISSEMINATION INFORMATION	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. FOR OFFICIAL USE ONLY INFORMATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>
k. OTHER <i>(Specify)</i>	<input type="checkbox"/>	<input type="checkbox"/>

11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:

	YES	NO
a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. RECEIVE CLASSIFIED DOCUMENTS ONLY	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. RECEIVE AND GENERATE CLASSIFIED MATERIAL	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. PERFORM SERVICES ONLY	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. REQUIRE A COMSEC ACCOUNT	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. HAVE TEMPEST REQUIREMENTS	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k. BE AUTHORIZED TO USE THE DEFENSE COUNSEL SERVICE	<input type="checkbox"/>	<input checked="" type="checkbox"/>
l. OTHER <i>(Specify)</i> Notification of Government Security Activity is required	<input checked="" type="checkbox"/>	<input type="checkbox"/>

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through (Specify):

ASC/PA Bldg 14
1865 4th Street, Suite 15
WPAFB OH 45433-6503

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs) for review.
In the case of DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classification guidance need for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (If it is appropriate for the classified effort, attach or forward under separate correspondence, any documents/guidelines/contracts reference herein. Add additional pages as needed to provide complete guidance.)

- a. Ref Blk 10a: COMSEC and/or cryptographic requirements apply. See DOD 5220.22-S for details.
- b. Ref Blk 10e(2): General Intelligence Material/Foreign Disclosure applies. See Addendum.
- c. Ref Blk 10j: For Official Use Only (FOUO) applies. See Addendum.
- d. Ref Blk 11a: Releasing Government activity will furnish complete classification guidance for the service to be performed. Contractor performance is restricted to Bldg 620, Area B.
- e. Ref Blk 11i: On-base performance in Area B, Bldg 620, WPAFB OH 45433-7334.
- f. Ref Blk 11i: The Notification of Government Security Activity and visitor group security agreement clause applies: See contract clause in Section I for details.
- g. Transfer of documents to other IR&D efforts is not permitted.
- h. The National Industrial Security Program Operating Manual (NISPOM), Jan 95, applies.
- i. Program Manager: Lydia M. Harris, WL/AAST, 255-4854 x 4186

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use item 13 if additional space is needed.)

☐ Yes ☒ No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, identify specific areas or elements involved and the activity responsible for inspections. Use item 13 if additional space is needed.)

☒ Yes ☐ No

Contractor performance will occur at Wright-Patterson Air Force Base Ohio. DIS is relieved of all inspection responsibility for contractor performance on the installation. ASC/SYSPC will maintain security oversight.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. TYPED NAME OF CERTIFYING OFFICIAL

Bettie Steely

b. TITLE

Contracting Officer

c. TELEPHONE (Include Area Code)

(937) 255-5252

d. ADDRESS (Include Zip Code)

WL/AAK

Bldg 7

Wright-Patterson AFB OH 45433

e. SIGNATURE

Bettie L. Steely

17. REQUIRED DISTRIBUTION

☒

a. CONTRACTOR

☐

b. SUBCONTRACTOR

☒

c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR

☐

d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION

☐

e. ADMINISTRATION CONTRACTING OFFICER

☒

f. OTHERS AS NECESSARY

Asc/syspc

DD Form 254, DEC 80 (REVERSE) (EF-VI), PERFORM PRO

F33613-97-D-1045, P00006

18 Nov 97

Sm

Section J, ATCH #2

Page 2 of 5

GENERAL INTELLIGENCE MATERIAL/FOREIGN DISCLOSURE

1. Special Requirements for General and Foreign Intelligence Material. In addition to the requirements and controls for classified material, the Director, Central Intelligence, sets up additional requirements and controls for intelligence in the possession of contractors. The contractor must:

a. Maintain control of all intelligence materials released in his or her custody in accordance with DOD 5220.22-M, the National Industrial Security Program Operating Manual (NISPOM), January 1995, paragraphs 5-200, 201 and 202 for control. Contractors agree that all intelligence material released, all reproductions and other material generated (including reproductions) are the property of the US Government.

b. Maintain control of all reproduced intelligence data in the same manner as the original.

c. Destroy intelligence materials in accordance with approved methods identified in the NISPOM.

d. Restrict access to those individuals with a valid need-to-know who are actually providing services under the contract. Further dissemination to other contractors, subcontractors, or other government agencies and private individuals or organization is prohibited unless authorized in writing by the Contracting Officer's Representative (COR) with prior approval of ASC/NAIC/POA.

e. Not release intelligence data to foreign nationals or immigrant aliens, regardless of their security clearance or contract status, without advance written permission from the COR, Foreign Disclosure Policy Office (ASC/SYSR), and ASC/NAIC/POA.

f. Ensure that each employee having access to intelligence material is fully aware of the special security requirements for this material.

2. Returning Intelligence to the Air Force. Contractors must return intelligence data to the COR at the termination or completion of a contract unless the COR has provided written approval for the contractor to retain for an additional two years. If retention is required beyond the two year period, the contractor must again request and receive written retention authority from the COR. If the COR grants retention authority, he or she must provide a copy of the written approval to ASC/NAIC/POA.

3. Release of Classified and Unclassified Information to Foreign Government and Their Representatives. Any military activity or defense contractor receiving a request from a foreign government or a representative thereof, for intelligence data about this program, shall forward the request to ASC/SYSR and ASC/NAIC/POA. Information released under Foreign Military Sales (FMS) must comply with the specific USAF disclosure guidance issued for the specific FMS customer.

21 August 1996

USE OF SPECIAL INTELLIGENCE MARKINGS1. Authorized Control Markings of Intelligence Information

a. "Dissemination and Extraction of Information Controlled by Originator (ORCON)".

This marking is used only on classified intelligence that clearly identifies or would reasonably permit ready identification of intelligence sources or methods that are particularly susceptible to countermeasures that would nullify or measurably reduce their effectiveness. It is used to enable the originator to maintain continuing knowledge and supervision of the further use of intelligence beyond the original dissemination. This control marking may not be used when an item of information will reasonably be protected by use of any other markings specified herein, or by the application of the "need-to-know" principle and safeguarding procedures of the security classification system.

b. "Not Releasable to Foreign Nationals (NOFORN)"

This control marking is used to identify classified intelligence material that may not be released in any form to foreign governments, foreign nationals, or non-US citizens without permission of the US Government originator, and then only when released in compliance with the National Disclosure Policy.

c. "Authorized for Release to (Name of country(ies)/international organization"

This marking is used to identify classified intelligence material that the US Government Originator has predetermined to be releasable or has been released through established foreign disclosure channels to the indicated country(ies) or organization.

2. Procedures Governing Use of Control Markings

a. Any recipient desiring to use intelligence in a manner contrary to the restrictions established by the control markings set forth above, shall obtain the advanced permission of the originating agency. Such permission applies only to the specific purposes agreed to by the originator and does not automatically apply to all recipients. Originator will ensure that prompt consideration is given to recipients' requests, with particular attention to reviewing and editing if necessary, sanitized or paraphrased versions to derive a text suitable for release subject to lesser or no control markings.

b. The control markings authorized above shall be shown on the title page, front cover, and other applicable pages of documents, incorporated in the text of electrical communications, shown on graphics, and associated (in full or abbreviated form) with data stored or processed in automatic data processing systems. The control markings also shall be indicated by parenthetical use of the markings abbreviations at the beginning or end of the appropriate portions. If the control markings apply to several or all portions, the document may be marked with a statement to this effect rather than marking each portion individually.

c. The control markings in paragraph one (1) shall be individually assigned at the time of preparation of intelligence products and used in conjunction with security classifications and other markings specified by EO 12958 and its implementing ISOO Directive. The markings shall be carried forward to any new format in which the same information is incorporated including oral and visual presentations.

Current Guidance

Implementation of DCID 1/7, 16 Apr 96, Postponed.

FOR OFFICIAL USE ONLY

The following procedures will be used to protect FOR OFFICIAL USE ONLY (FOUO) information.

1. **HANDLING:** Access to FOUO material shall be limited to those employees who need the material to do their jobs. The FOR OFFICIAL USE ONLY marking is assigned to information when created by a DOD User Agency. FOR OFFICIAL USE ONLY is not a classification, but requires extra precautions to ensure it is not released to the public.

2. **MARKING:**

a. Mark an unclassified document containing FOUO information "FOR OFFICIAL USE ONLY" at the bottom of each page containing FOUO information and on the bottom of the front page or front cover (if any) and on the back of the last page and on the back cover (if any).

b. In a classified document, mark:

- An individual paragraph that contains FOUO, but not classified information, by placing "(FOUO)" at the beginning of the paragraph.

- The top and bottom of each page that has both FOUO and classified information, with the highest security classification of the information on that page.

- "FOUO" at the bottom of each page that has FOUO but not classified.

- If a classified document also contains FOUO information or if the classified material become FOUO when declassified, place the following statement on the bottom of the cover or the first page, under the classification marking: "NOT: If declassified, review the document to make sure material is not FOUO and not exempt under AFI 37-131 before public release."

c. Mark other records, such as computer print outs, photographs, films, tapes, or slide "FOR OFFICIAL USE ONLY" so that the receiver or viewer knows the record contains FOUO information.

d. Mark each part of a message that contains FOUO information. Unclassified messages containing FOUO information must show the abbreviation "FOUO" before the text begins.

e. Make sure that documents that transmit FOUO materials call attention to any FOUO attachments.

f. Any FOUO material released to a contractor by a DOD User Agency must have the following statement on the front page or cover: **THIS DOCUMENT CONTAINS INFORMATION EXEMPT FROM MANDATORY DISCLOSURE UNDER THE FREEDOM OF INFORMATION ACT. EXEMPTION(S) _____ APPLY.**

3. **STORAGE:** To safeguard FOR OFFICIAL USE ONLY records during normal duty hours, place them in an out-of-sight location if your work area is accessible to persons who do not have a valid need for the information. After normal duty hours, store FOUO records to prevent unauthorized access. File them with other unclassified records in unlocked files or desks when internal building security is provided. When there is not internal security, locked buildings or rooms usually provide adequate after-hours protection. For additional protection, store FOUO material in locked containers such as file cabinets, desks, or bookcases. Expenditure of funds for security containers or closed areas solely for the protection of FOUO data is prohibited.

4. **TRANSMISSION:** FOUO material shall be transmitted by the same methods as other UNCLASSIFIED material. Discussion of FOUO material on the telephone is authorized if necessary for performance of the contract. FOUO information may be transmitted over telephone lines in digital form, by telecopies, or by other DSN teletype lines without encryption.

5. **RELEASE:** FOUO information shall not be released outside the contractor's facility except to representatives of the DOD.

6. **DESTRUCTION:** When no longer needed, FOUO information may be disposed of by a method which will preclude its disclosure to unauthorized individuals.

AWARD/CONTRACT

1. PROC INSTRUMENT ID NO. (PIN) F33615-97-D-1045		2. EFFECTIVE DATE MAIL DATE	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.	1. PAGE 1 OF 29
5. ISSUED BY USAF/AFMC/ASC WRIGHT LABORATORY WL/AAKD BLDG 7 2530 C ST WRIGHT-PATTERSON AFB OH 45433-7607 NEGOTIATOR: STACEY A. SIEMER PHONE: (937) 255-2206		6. CODE FA8650	7. ADMINISTERED BY DCMC SAN DIEGO 7675 DAGGET ST., SUITE 200 SAN DIEGO, CA 92111-2241 PAS: NONE	4. CERTIFIED FOR NATIONAL DEFENSE UNDER BDC DO-A7 REG2/DMS REG1 RATING
8. CONTRACTOR NAME AND ADDRESS TRW INC, AVIONICS & SURVEILLANCE GROUP MILITARY ELECTRONICS AND AVIONICS DIVISION ONE RANCHO CARMEL SAN DIEGO, CA 92198 PHONE: (619) 592-3641		9. CODE 65409	10. FACILITY CODE BT321 <small>IF "Y" FOR MULTIPLE FACILITIES SEE SECT 101</small>	11. SUBMIT INVOICES (4 COPIES UNLESS OTHERWISE SPECIFIED) TO ADDRESS SHOWN IN
12. DISCOUNT FOR PROMPT PAYMENT		13. NET 1. ST % DAYS DAYS 2. NO % DAYS IF "Y" SEE SECT 101 3. RD % DAYS		
14. DISCOUNT FOR PROMPT PAYMENT		15. OTHER		
16. DISCOUNT FOR PROMPT PAYMENT		17. DISCOUNT FOR PROMPT PAYMENT		
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98. DISCOUNT FOR PROMPT PAYMENT		99. DISCOUNT FOR PROMPT PAYMENT		
100. DISCOUNT FOR PROMPT PAYMENT		101. DISCOUNT FOR PROMPT PAYMENT		

SECTION B SUPPLIES/SERVICES FULL TEXT CLAUSES

1. 5352.216-9001 PAYMENT OF FEE (AFMC) (JUL 1997)

The estimated cost and fee for this contract will be determined for each individual delivery order. The applicable fixed fee or target fee set forth for each delivery order may be increased or decreased only by negotiation and modification of the contract for added or deleted work. As determined by the contracting officer, it shall be paid as it accrues, in regular installments based upon the percentage of completion of work (or the expiration of the agreed-upon period(s) or completion of each task order for term contracts, based upon the percentage of hours completed as related to the total hours.)

Estimated Cost: To be determined for each delivery order

Fixed Fee: To be determined for each delivery order
(Insert Target or Fixed Fee)

2. 5352.232-9001 IMPLEMENTATION OF LIMITATION OF FUNDS (AFMC) (JUL 1997)

The sums allotted to this contract and available for payment of costs under all contract line items in accordance with the clause in Section I entitled "Limitation of Funds," will be established for each individual delivery order as required.

SECTION B SUPPLIES OR SERVICES AND PRICE/COST

Item No	Quantity	Pur Unit	Unit Price	Total Price
0001	1	LO	\$ NSP	\$ NSP

Noun: RESEARCH AND DATA

ACRN: U Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: GWLAA977201610 Proj Mgr: U
Contract Type :

Descriptive Data

A. Conduct Research entitled 'Avionics Communication, Navigation, Identification Exploration' in accordance with Attachment 1, Statement of Objectives (SOO), dated 14 Mar 97. Deliver data in accordance with Contract Data Requirements List, dated 18 Mar 97.

B. Payment instructions for the subline items shown below are contained in Section G, paragraph 1.

<u>Item No</u>	<u>Quantity</u>	<u>Pur Unit</u>	<u>Unit Price</u>	<u>Total Price</u>
0002	1	LO	\$ NSP \$	NSP

Noun: HARDWARE

ACRN: U Sec Clas: U NSN: N
Site Codes PQA: D ACP: D FOB: D
PR No: Proj Mgr: FY1456
Contract Type :

Descriptive Data

Deliver hardware in accordance with the Statement of Work (SOW) for each Delivery Order.

Item No	Quantity	Pur Unit	Unit Price	Total Price
0003	1	LO	\$ NSP	NSP

Noun: COMPUTER SOFTWARE

ACRN: U Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: Proj Mgr: GFY1175
 Contract Type :

Descriptive Data

Deliver software in accordance with Statement of Work (SOW) for each Delivery Order.

Item No	Quantity	Pur Unit	Unit Price	Total Price
0004	1	LO	\$ NSP	NSP

Noun: NONDEVELOPMENTAL/MATERIALS

ACRN: U Sec Clas: U NSN: N
 Site Codes PQA: D ACP: D FOB: D
 PR No: Proj Mgr: GFY1175
 Contract Type :

Descriptive Data

Deliver nondevelopmental/materials in accordance with Statement of Work (SOW) for each Delivery Order.

PART I

SECTION C

DESCRIPTION/SPECIFICATION

STATEMENT OF WORK (SOW)

The Statement of Work (SOW) entitled "Avionics Communication, Navigation, Identification Exploration" dated 5 Jun 97, is incorporated as Attachment I, Section J.

SECTION D

PACKAGING AND MARKING

1. 5352.247-9008 CONTRACTOR COMMERCIAL PACKAGING AND MARKING (AFMC JUL 97)

(1) Items shall be packaged and marked in accordance with the contractor's best commercial practice to ensure undamaged arrival at destination. Individual shipments exceeding 150 pounds or 108 inches in length or 130 inches in girth plus length, shall be packaged on skidded crates or palletized to allow handling by forklift.

(2) The exterior container shall be marked (readable from 24 inches) "NOT FOR OUTSIDE STORAGE."

SECTION E

INSPECTION AND ACCEPTANCE

I. NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

1. FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES

PARAGRAPH CLAUSE TITLE & DATE

52.246-8 INSPECTION OF RESEARCH AND DEVELOPMENT - COST-REIMBURSEMENT (APR 1984)

II. DOD FAR SUPPLEMENT CONTRACT CLAUSES

PARAGRAPH CLAUSE TITLE & DATE

252.246-7000 MATERIAL INSPECTION AND RECEIVING REPORT (DEC 1991)

5352.246-9001 INSPECTION AND ACCEPTANCE (AFMC) (JUL 1997)

a. In accordance with FAR 46.401(b) and 46.503, Place of acceptance, Government Contract Quality Assurance Inspection will be at Destination.

b. Inspection and acceptance of data will be in accordance with the Contract Data Requirements Lists (CDRLs) attached hereto. In those instances where the symbol "LT" appears in block 7 of the CDRL, the place for such action shall be at the office designated as the "Technical Office."

SECTION F

DELIVERIES OR PERFORMANCE

1. **NOTICE:** The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

I. **FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES**

PARAGRAPH

CLAUSE TITLE & DATE

52.242-15 STOP-WORK ORDER (AUG 1989) - ALTERNATE 1 (APR 1984)
52.247-34 F.O.B. DESTINATION (NOV 1991)

2. **CONTRACT DELIVERIES**

The terms "MAC" and "MARO", as used within this contract in conjunction with contract delivery requirements (including data deliveries), are hereby defined to mean "months after the effective date for award of the contractual action (as shown in block 3, Section A, AFMC Form 701)".

SECTION F SUPPLIES SCHEDULE DATA

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0001	U	U	U	
	<u>Delivery Date</u>	<u>Quantity</u>		
A.	60MARO	1		
B.				
C.				
D.				
E.				

Descriptive Data

The scheduled delivery date for the approved final technical report is 60 months after mailing date. All data shall be delivered in accordance with Exhibit A, Contract Data Requirements List, DD Form 1423, dated 18 Mar 97. The technical effort must be completed no later than 60 months after mailing date. See DD Form 1423 for mailing address.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0002	U	U	FY1456	
	<u>Delivery Date</u>	<u>Quantity</u>		
A.	60MARO	1		
B.				
C.				
D.				
E.				

Descriptive Data

The scheduled delivery date for hardware is 60 months after mailing date. See Section H for the shipment address.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0003	U	U	U	

<u>Delivery Date</u>	<u>Quantity</u>
60MARO	1

Descriptive Data

The scheduled delivery date for computer software is 60 months after mailing date.

<u>CLIN</u>	<u>ACRN</u>	<u>Sec Clas</u>	<u>Ship To</u>	<u>Mark For</u>
0004	U	U	U	

<u>Delivery Date</u>	<u>Quantity</u>
60MARO	1

Descriptive Data

The scheduled delivery date for NONDEVELOPMENTAL/MATERIALS is 60 months after mailing date.

1. PAYMENT INSTRUCTIONS FOR MULTIPLE ACCOUNTING CLASSIFICATION CITATIONS

Payment for all effort under this contract should be made in the order and amounts shown in the informational subclin(s) in Section B, CLIN 0001 of the contract and recapped below. Exhaust the funds in each ACRN before using funds from the next listed ACRN.

ACRNSUBCLIN NO.TOTAL OBLIGATED

TO BE PROVIDED IN EACH DELIVERY ORDER.

2. PROJECT ENGINEER

Lydia Harris
WLA/AST
(927) 255-4854 EXT 4186

3. SOLICITATION NUMBER

F33615-97-R-1045

4. TAXPAYER IDENTIFICATION NUMBER (TIN)

34-0575430

5. PAYMENT ADDRESS

TRW Inc.
P.O. Box 7777-W2890
Philadelphia, PA 19175-0001

6. INVOICE AND PAYMENT - COST REIMBURSEMENT (JUN 1996)

Invoices (or public vouchers), supported by a statement of cost for performance under this contract, shall be submitted to the cognizant Defense Contract Audit Agency (DCAA) office pursuant to FAR 52.216-7, Allowable Cost and Payment clause. Under the provisions of DFARS 242.803(b), the DCAA auditor, is designated as the authorized representative of the contracting officer (CO) for examining vouchers received directly from the contractor.

SECTION G

ACCOUNTING CLASSIFICATION DATA

TO BE ESTABLISHED AT CONTRACT AWARD FOR EACH DELIVERY ORDER

ACRN	Clas	Appropriation/Lmt Subhead/CPN Recip DODAAD <u>Supplemental Accounting Classification</u>	Obligation <u>Amount</u>
	ACCOUNT		
	UNCLAS		\$

pr/mipr data:

Descriptive Data

This form will be used at time of contract award for Delivery Order #1 and each subsequent delivery order.

1. TYPE CONTRACT

This is an Indefinite Delivery/Indefinite Quantity type contract with Cost Plus fixed Fee (Completion) type delivery orders expected to be issued in accordance with the terms of the contract.

2. GUARANTEED FINAL REPORT

If this contract is terminated prior to completion, the Contractor agrees to provide a final report in accordance with Exhibit A, Data Item A001. During the life of the contract, the contractor shall continuously reserve sufficient funds from the amount allotted to guarantee the preparation and delivery of said final report.

3. DELIVERY OF REPORTS

All reports and correspondence submitted under this contract shall include the contract number and project number and be forwarded prepaid. A copy of the letters of transmittal, unless otherwise required by the Contract Data Requirements List, shall be delivered to the issuing office (CO) and the Administrative Office (ACO). The addresses are set forth on the Cover Page, blocks 6 and 7, respectively and as shown below:

WL AAST Bldg 620 (Items A001 - A011)
2241 Avionics Circle Suite 32
WPAFB, OH 45433-7334
ATTN: Lydia M. Harris

WL AAF (Items A002 - A005)
ATTN: F33615-97-D-1045
2241 Avionics Circle
WPAFB, OH 45433

4. SHIPMENT ADDRESS

Any non-mailable items should be delivered to:

PC1456
WL/DOMH
Bldg 93, Area B, 2635 G Street
Contract Number F33615-97-D-1045
Wright-Patterson AFB OH 45433-7603
M/F: WL/AAST ATTN: Lydia Harris, (937) 255-4854 EXT. 4188

Mailable items should be sent to the AF Project Engineer at the address shown on the Contract Data Requirements List.

5. INCORPORATION OF SECTION K BY REFERENCE

Pursuant to Federal Acquisition Regulation (FAR) 15.406-1(b), Section K of the solicitation is hereby incorporated herein by reference.

6. BASE SUPPORT

The items contemplated by the clause entitled Base Support are as follows:

Work benches, general purpose equipment, and personal computers in the Avionics Communications, Navigations, Identification Exploration Facility, Bldg 620, Area B, Wright Patterson AFB, OH.

Office space in WL/AAST, Area B, Building 620, for up to eight full-time and/or part-time contractor personnel.

7. LIST OF DATA/SOFTWARE TO BE PROVIDED WITH LESS THAN UNLIMITED RIGHTS

With the exception of the technical data or computer software set out below, all technical data and computer software to be delivered under this contract shall be furnished with unlimited rights as defined in Section I, clause DFARS 52.227-7013, 252.227-7014 or 252.227-7018 as applicable.

ITEMS, COMPONENTS,
PROCESSES OR
COMPUTER SOFTWARE

DRAWING/DOCUMENT
NUMBER OR TITLE

GOVERNMENT
RIGHTS

To be identified separately for each Delivery Order.

8. COMSEC ACCESS AND/OR CRYPTOGRAPHIC ACCESS

The contractor is governed by DOD 5220.22-S, COMSEC supplement to the Industrial Security Manual. Access to COMSEC material/information is restricted to U.S. citizens holding final U.S. government clearances and is not releasable to personnel holding only a reciprocal clearance. Personnel requiring COMSEC access shall be briefed IAW DOD 5220.22-S. NOTE: The COMSEC/crypto briefing applies only to the use and control of crypto equipment and specialized COMSEC publications. NACSIM/NACSEM documents are not considered COMSEC controlled material. Additionally, cryptographic information/equipment shall be retained in a contractor facility COMSEC account IAW DOD 5220.22-S. The Air Force program/project manager shall designate the number of personnel requiring cryptographic access. The number will be limited to the minimum necessary and will be based on a strict need-to-know basis.

9. MAXIMUM/MINIMUM (FEB 1994)

Pursuant to FAR 52.216-22(b), the *maximum* amount is defined as that set forth on page 1, AFMC Form 701, block 22, which will be established at time of contract award. The *minimum* amount is defined as the total incremental funding amount obligated by the delivery order(s) issued at contract award.

(ASC WL/PK 94-05)

10. ORDERING

a. Individual delivery orders will be required from time to time to assign specifically defined requirements to the contractor.

b. Orders shall be issued against the contract in writing on a DD Form 1155. Each order shall identify the specific effort to be accomplished, the completion date, and the required deliverables. Each order shall contain a citation of funds from which payments shall be made and shall be signed by the Contracting officer. An order is considered issued

when the government deposits the order in the mail or hands it to the contractor's representative.

c. Prior to issuance of a delivery order, the Contracting Officer will send a Statement of Work (SOW) to the contractor. The contractor shall submit a written technical and cost proposal for accomplishing the effort to the Contracting Officer. The proposal shall include the following information as a minimum:

- (1) The contractor's overall plan for accomplishing the requirements of the SOW.
- (2) Milestones associated with accomplishment of the SOW.
- (3) Justification, if necessary, for using team members (subcontractors) other than those proposed and negotiated in award of the original contract. The justification, for example, would document why the original team members cannot provide the technical expertise to accomplish the particular delivery order.
- (4) A cost proposal to include a breakdown of labor hours, indirect costs, materials, travel, subcontracting, and any other costs and fee. The contractor shall provide a cost breakdown of proposed subcontracts and its analysis of the reasonableness and realism of the proposed subcontracting. Performance periods for individual delivery orders may cross fiscal years. The contractor, therefore, shall break down proposed costs by fiscal year. The cost proposal shall be submitted on an SF 1411, Contract Pricing Proposal Cover Sheet, for each proposal in excess of \$500,000.00 or for those of a lesser amount if requested by the Contracting Officer.
- (5) Certified cost and pricing data shall be required for any order anticipated to cost more than \$500,000.00.

PART II
SECTION I

CONTRACT CLAUSES

1. NOTICE: The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION CONTRACT CLAUSES

<u>PARAGRAPH</u>	<u>CLAUSE TITLE & DATE</u>
52.202-1	DEFINITIONS (OCT 1995)
52.203-3	GRATUITIES (APR 1984)
52.203-5	COVENANT AGAINST CONTINGENT FEES (APR 1984)
52.203-6	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT (JUL 1995)
52.203-7	ANTI-KICKBACK PROCEDURES (JUL 1995)
52.203-8	CANCELLATION, RECISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)
52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)
52.204-2	SECURITY REQUIREMENTS (AUG 1996)
52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER (JUN 1996)
52.209-6	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)
52.211-5	NEW MATERIAL (MAY 1995)
52.211-7	OTHER THAN NEW MATERIAL, RESIDUAL INVENTORY AND FORMER GOVERNMENT SURPLUS PROPERTY (MAY 1995)
52.211-15	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEP 1990)
52.215-2	AUDIT AND RECORDS - NEGOTIATIONS (AUG 1996)
52.215-25	SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS (OCT 1995)
52.215-26	INTEGRITY OF UNIT PRICES (JAN 1997)
52.215-33	ORDER OF PRECEDENCE (JAN 1986)
52.216-7	ALLOWABLE COST AND PAYMENT (MAR 1997) Modified by deleting from para (a) the words "Sub-part 31.2" and substituting for them "Sub-part 31.3"
52.216-8	FIXED FEE (MAR 1997)
52.216-18	ORDERING (OCT 1995) Para (a), dates are from Contract Award through 60 MARO.
52.216-19	ORDER LIMITATIONS (OCT 1995) Para (a), \$1,000.00; Para (b)(1), \$25,000; Para (b)(2), \$25,000; Para (b)(3), 30 days. Para (d) 7 days.
52.216-22	INDEFINITE QUANTITY (OCT 1995) Para (d), 60 MARO.
52.219-8	UTILIZATION OF SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED BUSINESS CONCERNS (JUN 1997)
52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)
52.222-2	PAYMENT FOR OVERTIME PREMIUM (JUL 1990) Para (a), "0" is inserted. The inserted figure does not apply to the exceptions in subparagraph (a)(1) through (a)(4) of the clause.

52.222-20	WALSH-HEALEY PUBLIC CONTRACTS ACT (DEC 1996)
52.222-26	EQUAL OPPORTUNITY (APR 1984)
52.222-28	EQUAL OPPORTUNITY PREAWARD CLEARANCE OF SUBCONTRACTS (APR 1984)
52.222-35	AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS (APR 1984)
52.222-36	AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS (APR 1984)
52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1988)
52.223-2	CLEAN AIR AND WATER (APR 1984)
52.223-6	DRUG-FREE WORKPLACE (JAN 1997)
52.223-14	TOXIC CHEMICAL RELEASE REPORTING (OCT 1996)
52.225-11	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (OCT 1996)
52.226-1	UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (SEP 1996)
52.227-1	AUTHORIZATION AND CONSENT (JUL 1995) - ALTERNATE I (APR 1984)
52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)
52.227-10	FILING OF PATENTS APPLICATIONS - CLASSIFIED SUBJECT MATTER (APR 1984)
52.227-12	PATENT RIGHTS - RETENTION BY THE CONTRACTOR (LONG FORM) (JAN 1997) The contractor shall forward the invention reports called for by the Patents Rights clause through the Administrative Contracting Office addressed to the Staff Judge Advocate (Patent Counsel), AFMC LO/JAZI, Bldg 11, Area B, 2240 B Street, Suite 5, WPAFB, OH 45433-7109.
52.228-7	INSURANCE - LIABILITY TO THIRD PERSONS (MAR 1996)
52.230-2	COST ACCOUNTING STANDARDS (APR 1996)
52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS (APR 1996)
52.232-9	LIMITATION ON WITHHOLDING OF PAYMENTS (APR 1984)
52.232-17	INTEREST (JUN 1996)
52.232-22	LIMITATION OF FUNDS (APR 1984)
52.232-23	ASSIGNMENT OF CLAIMS (JAN 1986)
52.232-25	PROMPT PAYMENT (JUN 1997)
52.232-33	MANDATORY INFORMATION FOR ELECTRONIC FUNDS TRANSFER PAYMENTS (AUG 1996)
52.233-1	DISPUTES (OCT 1995)
52.233-3	PROTEST AFTER AWARD (AUG 1996) - ALTERNATE I (JUN 1985)
52.237-2	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION (APR 1984)
52.242-1	NOTICE OF INTENT TO DISALLOW COSTS (APR 1984)
52.242-3	PENALTIES FOR UNALLOWABLE COSTS (OCT 1995)
52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS (JAN 1997)
52.242-13	BANKRUPTCY (JUL 1995)
52.243-2	CHANGES - COST-REIMBURSEMENT (AUG 1987) - ALTERNATE V (APR 1984)
52.243-6	CHANGE ORDER ACCOUNTING (APR 1984)
52.244-2	SUBCONTRACTS (COST-REIMBURSEMENT AND LETTER CONTRACTS) (FEB 1997) - ALTERNATE I (AUG 1996)
52.244-5	COMPETITION IN SUBCONTRACTING (DEC 1996)
52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (OCT 1995)
52.246-23	LIMITATION OF LIABILITY (FEB 1997)
52.247-1	COMMERCIAL BILL OF LADING NOTATIONS (APR 1984)
52.249-6	TERMINATION (COST-REIMBURSEMENT) (SEP 1996)
52.249-14	EXCUSABLE DELAYS (APR 1984)
52.253-1	COMPUTER GENERATED FORMS (JAN 1991)

II. DEFENSE FAR SUPPLEMENT CONTRACT CLAUSES (1991 DFARS)

<u>PARAGRAPH</u>	<u>CLAUSE TITLE & DATE</u>
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- 252.203-7001 SPECIAL PROHIBITION ON EMPLOYMENT (JUN 1997)
- 252.203-7002 DISPLAY OF DOD HOTLINE POSTER (DEC 1991)
- 252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)
- 252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)
- 252.205-7000 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)
- 252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ON-SITE INSPECTIONS UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995)
- 252.215-7000 PRICING ADJUSTMENTS (DEC 1991)
- 252.215-7002 COST ESTIMATING SYSTEM REQUIREMENTS (DEC 1991)
- 252.219-7004 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (TEST PROGRAM) (JUN 1997)
- 252.223-7001 HAZARD WARNING LABELS (DEC 1991)
- 252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)
- 252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)
- 252.225-7009 DUTY-FREE ENTRY--QUALIFYING COUNTRY END PRODUCTS AND SUPPLIES (JAN 1997)
- 252.225-7012 PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (FEB 1997)
- 252.225-7014 PREFERENCE FOR DOMESTIC SPECIALTY METALS (NOV 1995) - ALTERNATE I (FEB 1997)
- 252.225-7016 RESTRICTIONS ON THE ACQUISITION OF BALL AND ROLLER BEARINGS (JUN 1997)
- 252.225-7025 RESTRICTION ON ACQUISITION OF FORGINGS (JUN 1997)
- 252.225-7026 REPORTING OF CONTRACT PERFORMANCE OUTSIDE THE UNITED STATES (NOV 1995)
- 252.225-7030 RESTRICTION ON ACQUISITION OF CARBON, ALLOY AND ARMOR STEEL PLATE (OCT 1992)
- 252.227-7013 RIGHTS IN TECHNICAL DATA--NONCOMMERCIAL ITEMS (NOV 1995)
- 252.227-7014 RIGHTS IN NONCOMMERCIAL COMPUTER SOFTWARE AND NONCOMMERCIAL COMPUTER SOFTWARE DOCUMENTATION (JUN 1995)
- 252.227-7016 RIGHTS IN BID OR PROPOSAL INFORMATION (JUN 1995)
- 252.227-7019 VALIDATION OF ASSERTED RESTRICTIONS--COMPUTER SOFTWARE (JUN 1995)
- 252.227-7025 LIMITATIONS ON THE USE OR DISCLOSURE OF GOVERNMENT-FURNISHED INFORMATION MARKED WITH RESTRICTIVE LEGENDS (JUN 1995)
- 252.227-7030 TECHNICAL DATA--WITHHOLDING OF PAYMENT (OCT 1988)
- 252.227-7036 CERTIFICATION OF TECHNICAL DATA CONFORMITY (JAN 1997)
The term "delivered" means accompanied by a DD Form 250, Material Inspection and Receiving Report.
- 252.227-7037 VALIDATION OF RESTRICTIVE MARKINGS ON TECHNICAL DATA (NOV 1995)
- 252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)
- 252.232-7006 REDUCTION OR SUSPENSION OF CONTRACT PAYMENTS UPON FINDING OF FRAUD (AUG 1992)
- 252.235-7010 ACKNOWLEDGEMENT OF SUPPORT AND DISCLAIMER (MAY 1995)
- 252.235-7011 FINAL SCIENTIFIC OR TECHNICAL REPORT (MAY 1995)
- 252.242-7005 COST/SCHEDULE STATUS REPORT (MAR 1997)
- 252.245-7001 REPORTS OF GOVERNMENT PROPERTY (MAY 1994)
- 52.215-10 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF PROPOSALS (MAR 97)

2. 52.215-30 FACILITIES CAPITAL COST OF MONEY (SEP 1987)

a. Facilities capital cost of money will be an allowable cost for the delivery orders issued under the contemplated contract, if the criteria for allowability in subparagraph 31.205-10(a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective contractor to propose facilities capital cost of money in its offer.

b. If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

3. 52.252-2 CLAUSES INCORPORATED BY REFERENCE (JUN 1988)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available.

4. 5352.235-9000 SCIENTIFIC/TECHNICAL INFORMATION (STINFO) (MAY 1996)

If not already registered, the Contractor shall register for Defense Technical Information Center (DTIC) service by contacting the following:

Defense Technical Information Center: DTIC/BCS
8725 John J. Kingman Road
Suite 0944
Ft Belvoir, VA 22060-6218
(703) 767-8273
Fax: (703) 767-8228

To avoid duplication of effort and conserve scientific and technical resources the Contractor shall search existing sources in DTIC to determine the current state-of-the-art concepts, studies, etc.

5. 252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (NOV 1995)

a. Definitions. As used in this clause--

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract. However, effective May 1, 1996, the term does not include a supplier, materialman, distributor, or vendor of commercial items or commercial components.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; building and facilities; ships; floating equipment and vessels of every character, type and description, with parts, subassemblies, accessories and equipment; machine tools; material; equipment; stores of all kinds; end items construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

b. The Contractor shall employ United States-flag vessels in the transportation by sea of any supplies to be furnished in the performance of this contract. The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S. flag-vessels, if the Contractor or a subcontractor believes that--

- (1) U.S.-flag vessels are not available for timely shipment;
- (2) The freight charge are inordinately excessive or unreasonable; or
- (3) Freight charges are higher than charges to private persons for transportation of like goods.

c. The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approval to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Request shall contain at a minimum --

- (1) Type, weight and cube cargo;
- (2) Required shipping date;
- (3) Special handling and discharge requirements;
- (4) Loading and discharge points;
- (5) Name of shipper and consignee;
- (6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

d. The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information--

- (1) Prime contract number;
- (2) Name of vessel;
- (3) Vessel flag of registry;
- (4) Date of loading;
- (5) Port of loading;
- (6) Port of final discharge;
- (7) Description of commodity;
- (8) Gross weight in pounds and cubic feet if available;
- (9) Total ocean freight in U.S. dollars; and
- (10) Name of the steamship company.

e. The Contractor agrees to provide with its final invoice under this contract a representation that to the best of its knowledge and belief --

- (1) No ocean transportation was used in the performance of this contract;
- (2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipment under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

<u>ITEM</u> <u>DESCRIPTION</u>	<u>CONTRACT</u> <u>LINE ITEMS</u>	<u>QUANTITY</u>
TOTAL		

f. If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

g. The contractor shall include in this clause, including this paragraph (g) in all subcontracts under this contract, which exceed the simplified acquisition threshold in Part 13 of the Federal Acquisition Regulation.

6. 52.223-11 OZONE-DEPLETING SUBSTANCES (JUN 1996)

a. Definition. "Ozone-depleting substance", as used in this clause, means any substance designated as Class I by the Environmental Protection Agency (EPA) (40 CFR Part 82), including but not limited to chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform; or any substance designated as Class II by EPA (40 CFR Part 82), including but not limited to hydrochlorofluorocarbons.

b. The Contractor shall label products which contain or are manufactured with ozone-depleting substances in the manner and to the extent required by 42 U.S.C. 7671j (b), (c), and (d) and 40 CFR Part 82, Subpart E, as follows:

"WARNING: Contains (or manufactured with, if applicable) _____, a substance(s) which harm(s) public health and environment by destroying ozone in the upper atmosphere."

* The Contractor shall insert the name of the substance(s).

7. 5352.204-9000 NOTIFICATION OF GOVERNMENT SECURITY ACTIVITY (MAY 1996)

Thirty days before the date contractor operations will begin on base, the contractor shall notify the security policy activity shown in the distribution block of the DD Form 254, DOD Contract Security Classification Specification, as to --

a. The name, address, and telephone number of this contract company's representative and designated alternate in the U.S. or overseas area, as appropriate;

b. The contract number and military contracting command;

c. The highest classification category of defense information to which contractor employees will have access;

d. The Air Force installations in the U.S. (in overseas areas identify only the APO number(s)) where the contract work will be performed;

e. The date contractor operations will begin on base in the U.S. or in the overseas area;

f. The estimated completion date of operations on base in the U.S. or in the overseas area; and

- g Any changes to information previously provided under this clause.

This requirement is in addition to visit request procedures contained in DoD 5220.22M, Industrial Security Manual, paragraph 37d.

8. 5352.223-9001 HEALTH AND SAFETY ON GOVERNMENT INSTALLATIONS (JUN 1997)

- a. In performing work under this contract on a Government installation, the Contractor shall --

- (1) Comply with the specific safety requirements established by this contract;
- (2) Comply with the health and safety rules of the Government installation that concern related activities not directly addressed in this contract;
- (3) Take all reasonable steps and precautions to prevent accidents and preserve the health and safety of Contractor and Government personnel performing or in any way coming in contact with the performance of this contract; and
- (4) Take such additional immediate precautions as the Contracting Officer may reasonably require for health and safety.

b. If this contract is performed on an Air Force installation, the Air Force Occupational Safety and Health Standards (AFOSH) developed in accordance with AFI 91-301, Air Force Occupational Safety, Fire Prevention and Health Program, in effect on the date of this contract, apply. If contract performance is on other than an Air Force installation, the Contractor shall comply with the safety rules of that Government installation, in effect on the date of this contract.

c. The Contracting Officer may, by written order, direct additional AFOSH and/or health/safety standards as may be required in the performance of this contract and any adjustments resulting from such direction will be in accordance with the Changes clause of this contract.

d. Any violation of these health and safety rules and requirements, unless promptly corrected as directed by the Contracting Officer, shall be grounds for termination of this contract in accordance with the Default clause of this contract.

9. 51.245-5 GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL OR LABOR-HOUR CONTRACTS) (DEV) (JUL 1995)

- a. Government-furnished property.

(1) The term "Contractor's managerial personnel," as used in paragraph (g) of this clause, means any of the Contractor's directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of --

- (i) All or substantially all of the Contractor's business;
 - (ii) All or substantially all of the Contractor's operation at any one plant, or separate location at which the contract is being performed; or
 - (iii) A separate and complete major industrial operation connected with performing this contract
- (2) The Government shall deliver to the Contractor, for use in connection with and under the terms of this contract, the Government-furnished property described in the Schedule or specifications, together with such related data and information as the Contractor may request and as may be reasonably required for the intended use of the property (hereinafter referred to as "Government-furnished property").

(3) The delivery or performance dates for this contract are based upon the expectation that Government furnished property suitable for use will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient time to enable the Contractor to meet the contract's delivery or performance dates.

(4) If Government-furnished property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt, notify the Contracting Officer, detailing the facts, and, as directed by the Contracting Officer and at Government expense, either effect repairs or modification or return or otherwise dispose of the property. After completing the directed action and upon written request of the Contractor, the Contracting Officer shall make an equitable adjustment as provided in paragraph (h) of this clause.

(5) If Government-furnished property is not delivered to the Contractor by the required time or times, the Contracting Officer shall, upon the Contractor's timely written request, make a determination of the delay, if any, caused the Contractor and shall make an equitable adjustment in accordance with paragraph (h) of this clause.

b. Changes in Government-furnished property.

(1) The Contracting Officer may, by written notice, (i) decrease the Government-furnished property provided or to be provided under this contract or (ii) substitute other Government-furnished property for the property to be provided by the Government or to be acquired by the Contractor for the Government under this contract. The Contractor shall promptly take such action as the Contracting Officer may direct regarding the removal, shipment, or disposal of the property covered by this notice.

(2) Upon the Contractor's written request, the Contracting Officer shall make an equitable adjustment to the contract in accordance with paragraph (h) of this clause, if the Government has agreed in the Schedule to make such property available for performing this contract and there is any --

(i) Decrease or substitution in this property pursuant to subparagraph (b)(1) above; or

(ii) Withdrawal of authority to use property, if provided under any other contract or lease.

c. Title.

(1) The Government shall retain title to all Government-furnished property.

(2) Title to all property purchased by the Contractor for which the Contractor is entitled to be reimbursed as a direct item of cost under this contract shall pass to and vest in the Government upon the vendor's delivery of such property.

(3) Title to all other property, the cost of which is reimbursable to the Contractor, shall pass to and vest in the Government upon --

(i) Issuance of the property for use in contract performance;

(ii) Commencement of processing of the property for use in contract performance; or

(iii) Reimbursement of the cost of the property by the Government, whichever occurs first.

(4) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), are subject to the provisions of this clause. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

d. Use of Government property. The Government property shall be used only for performing this contract, unless otherwise provided in this contract or approved by the Contracting Officer.

e. Property administration.

(1) The Contractor shall be responsible and accountable for all Government property provided under the contract and

shall comply with Federal Acquisition Regulation (FAR) Subpart 45.5, as in effect on the date of this contract.

(2) The Contractor shall establish and maintain a program for the use, maintenance, repair, protection, and preservation of Government property in accordance with sound business practice and the applicable provisions of FAR Subpart 45.5.

(3) If damage occurs to Government property, the risk of which has been assumed by the Government under this contract, the Government shall replace the items or the Contractor shall make such repairs as the Government directs. However, if the Contractor cannot effect such repairs within the time required, the Contractor shall dispose of the property as directed by the Contracting Officer. When any property for which the Government is responsible is replaced or repaired, the Contracting Officer shall make an equitable adjustment in accordance with paragraph (h) of this clause.

f. Access. The Government and all its designees shall have access at all reasonable times to the premises in which any Government property is located for the purpose of inspecting the Government property.

g. Limited risk of loss.

(1) The Contractor shall not be liable for loss or destruction of, or damage to, the Government property provided under this contract or for expenses incidental to such loss, destruction, or damage, except as provided in subparagraphs (2) and (3) below.

(2) The Contractor shall be responsible for loss or destruction of, or damage to, the Government property provided under this contract (including expenses incidental to such loss, destruction, or damage)-

(i) That results from a risk expressly required to be insured under this contract but only to the extent of the insurance required to be purchased and maintained or to the extent of insurance actually purchased and maintained, whichever is greater;

(ii) That results from a risk that is in fact covered by insurance or for which the Contractor is otherwise reimbursed, but only to the extent of such insurance or reimbursement;

(iii) For which the Contractor is otherwise responsible under the express terms of this contract;

(iv) That results from willful misconduct or lack of good faith on the part of the Contractor's managerial personnel; or

(v) That results from a failure on the part of the Contractor, due to willful misconduct or lack of good faith on the part of the Contractor's managerial personnel, to establish and administer a program or system for the control, use, protection, preservation, maintenance, and repair of Government property as required by paragraph (e) of this clause.

(3) (i) If the Contractor fails to act as provided by subdivision (g)(2)(v) above, after being notified (by certified mail addressed to one of the Contractor's managerial personnel) of the Government's disapproval, withdrawal of approval, or nonacceptance of the system or program, it shall be conclusively presumed that such failure was due to willful misconduct or lack of good faith on the part of the Contractor's managerial personnel.

(ii) In such event, any loss or destruction of, or damage to, the Government property shall be presumed to have resulted from such failure unless the Contractor can establish by clear and convincing evidence that such loss, destruction, or damage-

(A) Did not result from the Contractor's failure to maintain an approved program or system; or

(B) Occurred while an approved program or system was maintained by the Contractor.

(4) If the Contractor transfers Government property to the possession and control of a subcontractor, the transfer shall not affect the liability of the Contractor for loss or destruction of, or damage to, the property as set forth above. However, the Contractor shall require the subcontractor to assume the risk of, and be responsible for, any loss or destruction of, or damage to, the property while in the subcontractor's possession or control, except to the extent that the subcontract, with the advance approval of the Contracting Officer, relieves the subcontractor from such liability. In the absence of such approval, the subcontract shall contain appropriate provisions requiring the return of all Government property in as good condition as when

received, except for reasonable wear and tear or for its use in accordance with the provisions of the prime contract.

(5) The contractor shall notify the contracting officer upon loss or destruction of, or damage to, Government property provided under this contract, with the exception of low value property for which loss, damage or destruction is reported at contract termination, completion, or when needed for continued contract performance. The contractor shall take all reasonable action to protect the Government property from further damage, separate the damaged and undamaged Government property, put all the affected Government property in the best possible order, and furnish to the contracting officer a statement of --

- (i) The lost, destroyed, or damaged Government property;
- (ii) The time and origin of the loss, destruction, or damage;
- (iii) All known interests in commingled property of which the Government property is a part; and
- (iv) The insurance, if any, covering any part of or interest in such commingled property.

(6) The Contractor shall repair, renovate, and take such other action with respect to damaged Government property as the Contracting Officer directs. If the Government property is destroyed or damaged beyond practical repair, or is damaged and so commingled or combined with property of others (including the Contractor's) that separation is impractical, the Contractor may, with the approval of and subject to any conditions imposed by the Contracting Officer, sell such property for the account of the Government. Such sales may be made in order to minimize the loss to the Government, to permit the resumption of business, or to accomplish a similar purpose. The Contractor shall be entitled to an equitable adjustment in the contract price for the expenditures made in performing the obligations under this subparagraph (g)(6) in accordance with paragraph (h) of this clause. However, the Government may directly reimburse the loss and salvage organization for any of their charges. The Contracting Officer shall give due regard to the Contractor's liability under this paragraph (g) when making any such equitable adjustment.

(7) The Contractor shall not be reimbursed for, and shall not include as an item of overhead, the cost of insurance or of any reserve covering risk of loss or destruction of, or damage to, Government property, except to the extent that the Government may have expressly required the Contractor to carry such insurance under another provision of this contract.

(8) In the event the Contractor is reimbursed or otherwise compensated for any loss or destruction of, or damage to, Government property, the Contractor shall use the proceeds to repair, renovate, or replace the lost, destroyed, or damaged Government property or shall otherwise credit the proceeds to, or equitably reimburse, the Government, as directed by the Contracting Officer.

(9) The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any loss or destruction of, or damage to, Government property. Upon the request of the Contracting Officer, the Contractor shall, at the Government's expense, furnish to the Government all reasonable assistance and cooperation (including the prosecution of suit and the execution of instruments of assignment in favor of the Government) in obtaining recovery. In addition, where a subcontractor has not been relieved from liability for any loss or destruction of, or damage to, Government property, the Contractor shall enforce for the benefit of the Government the liability of the subcontractor for such loss, destruction, or damage.

h. Equitable adjustment. When this clause specifies an equitable adjustment, it shall be made to any affected contract provision in accordance with the procedures of the Changes clause. When appropriate, the Contracting Officer may initiate an equitable adjustment in favor of the Government. The right to an equitable adjustment shall be the Contractor's exclusive remedy. The Government shall not be liable to suit for breach of contract for --

- (1) Any delay in delivery of Government-furnished property
- (2) Delivery of Government-furnished property in a condition not suitable for its intended use;
- (3) A decrease in or substitution of Government-furnished property; or
- (4) Failure to repair or replace Government property for which the Government is responsible.

i. Final accounting and disposition of Government property. Upon completing this contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property not consumed in performing this contract or delivered to the Government. The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of the Government property as may be directed or

authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the cost of the work covered by this contract or paid to the Government as directed by the Contracting Officer. The foregoing provisions shall apply to scrap from Government property; provided, however, that the Contracting Officer may authorize or direct the Contractor to omit from such inventory schedules any scrap consisting of faulty castings or forging or of cutting and processing waste, such as chips, cuttings, borings, turnings, short ends, circles, trimmings, clippings, and remnants, and to dispose of such scrap in accordance with the Contractor's normal practice and account for it as a part of general overhead or other reimbursable costs in accordance with the Contractor's established accounting procedures.

(j) Abandonment and restoration of Contractor premises. Unless otherwise provided herein, the Government.

(1) May abandon any Government property in place, at which time all obligations of the Government regarding such abandoned property shall cease; and

(2) Has no obligation to restore or rehabilitate the Contractor's premises under any circumstances (e.g., abandonment, disposition upon completion of need, or contract completion). However, if the Government-furnished property (listed in the Schedule or specifications) is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (h) of this clause may properly include restoration or rehabilitation costs.

(k) Communications. All communications under this clause shall be in writing.

(l) Overseas contracts. If this contract is to be performed outside the United States of America, its territories, or possessions, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

10. 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

a. The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

b. The use in this solicitation or contract of any DOD FAR Supplement (48 CFR Chapter 2) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

11. 5352.204-9001 VISITOR GROUP SECURITY AGREEMENTS (MAY 1996)

Prior to beginning operations involving classified information on an installation identified on the DD Form 254 where the contractor is not required to have a facility security clearance, the contractor shall enter into a security agreement (or understanding) with the installation commander to ensure that its security procedures are properly integrated with those of the installation. As a minimum, the agreement shall identify the security actions which will be performed --

a. By the installation for the contractor, such as providing storage and classified reproduction facilities, guard services, security forms, security inspections under DoD 5220.22-M, paragraph 5ag, classified mail services, security badges, visitor control and investigating security incidents; and

b. Jointly by the contractor and the installation, such as packaging and addressing classified transmittals, security checks, internal security controls, and implementing emergency procedures to protect classified material.

12. 5352.223-9000 USE OF HAZARDOUS MATERIALS IN THE PERFORMANCE OF ON-BASE CONTRACTS (AFMC) (JUL 1997)

a. "Hazardous Material" as used in this clause includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

b. The list of hazardous materials identified under Section K clause FAR 52.223-3, Hazardous Material Identification and Material Safety Data, and Section I clause, DFARS 252.223-7001 Hazardous Warning Labels, shall be updated during performance of the contract whenever the contractor determines that any other material to be delivered or used on base, in excess of that identified, under this contract is hazardous based on changes in the composition of the item(s) or a revision to Federal Standard No. 313. Provide written notification of changes in the Material Safety Data Sheets (MSDSs), including a copy of the updated MSDS, of each item to the identified point of contact on the installation prior to use of the item on installation.

c. The contractor shall submit a Contractor Hazardous Material Report for each item identified under Section K clause FAR 52.223-3 Hazardous Material Identification and Material Safety Data and Section I clause DFARS 252.223-7001, Hazardous Warning Labels, or updates resulting from paragraph (b) of this clause 15 days prior to bringing the items on base and update the report at least monthly (beginning no later than 30 days after the material is brought on base) until removal of the hazardous material from the base.

d. All hazardous material used on base (including material to be used for a period of less than 24 hours) shall contain a hazardous material warning label. The label shall include a list of the hazardous chemical(s), material identification which matches the part number and /or trade name on the MSDS, appropriate hazard warnings (including description of target organs), and name and address of the chemical manufacturer, importer, or other responsible party.

e. The contractor is responsible for conducting and documenting employee hazard communication training prior to the commencement of work on base.

f. Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the contractor of any responsibility or liability for the safety of the Government, Contractor, or subcontractor personnel or property.

g. Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinance, and regulations (including the obtaining of licenses and permits in conjunction with hazardous material).

h. Notwithstanding any other rights in technical data specified elsewhere in this contract, the Government may use, duplicate, and disclose any data to which this clause is applicable to apprise personnel of the hazards to which they may be exposed and obtain medical treatment for those affected by the material. In addition, the government may allow others to use, duplicate and disclose data for these purposes.

13. 5352.225-9001 ENGLISH LANGUAGE REQUIREMENTS (AFMC) (JUL 1997)

a. Deliver all documents in the English language.

b. Provide an English language speaking person during in-plant visits, inspections, reviews, audits, and other similar activities.

5352.228-9001 INSURANCE CLAUSE IMPLEMENTATION (AFMC) (JUL 1997)

The contractor shall obtain and maintain the minimum kinds and amounts of insurance during performance of this contract as specified by FAR 28.307-2 and contemplated by FAR 52.228-5 and/or 52.228-7.

15. 5352.235-9001 KEY POSITIONS AND MINIMUM QUALIFICATIONS (AFMC) (JUL 1997)

a. Contractor personnel holding the position titles and having the qualifications listed below are considered essential to the work being performed under this contract:

Key Positions
(list by job title)

Minimum Qualifications:
(list minimum qualifications in terms
of education and/or experience)

Key position names will be identified by each delivery order

b. The contractor shall notify the contracting officer before the departure of any individual in a key position and identify the proposed substitution. Any proposed personnel substitution that does not meet the minimum qualification requirements described above requires the prior written approval of the contracting officer.

16. 5352.242-9000 CONTRACTOR ACCESS TO AIR FORCE INSTALLATIONS (MAY 1996)

a. The contractor shall obtain base identification and vehicle passes for all contractor personnel who make frequent visits to or perform work on the Air Force installation(s) cited in the contract. Contractor personnel are required to wear or prominently display installation identification badges or contractor-furnished, contractor identification badges while visiting or performing work on the installation.

b. The contractor shall submit a written request on company letterhead to the contracting officer listing the following: contract number, location of work site, start and stop dates, and names of employees and subcontractor employees needing access to the base. The letter will also specify the individual(s) authorized to sign for a request for base identification credentials or vehicle passes. The contracting officer will endorse the request and forward it to the issuing base pass and registration office or security police for processing. When reporting to the registration office, the authorized contractor individual(s) should provide a valid driver's license, current vehicle registration, and valid vehicle insurance certificate to obtain a vehicle pass.

c. During performance of the contract, the contractor shall be responsible for obtaining required identification for newly assigned personnel and for prompt return of credentials and vehicle passes for any employee who no longer requires access to the work site.

d. When work under this contract requires unescorted entry to controlled or restricted areas, the contractor shall comply with AFI 31-209, the Air Force Resource Protection Program, and AFI 31-501, Personnel Security Program Management, as applicable.

e. Upon completion or termination of the contract or expiration of the identification passes, the prime contractor shall ensure that all base identification passes issued to employees and subcontractor employees are returned to the issuing office.

f. Prior to submitting an invoice for final payment, the prime contractor shall obtain a clearance certification from the issuing office which states all base identification passes have been turned in, accounted for, or transferred to a follow-on contract. This certification shall be submitted to the contracting officer prior to submission of the final invoice for payment.

g. Failure to comply with these requirements may result in withholding of final payment.

17. 5352.244-9000 DELETION OF ADVANCE NOTIFICATION/CONSENT REQUIREMENT FOR SUBCONTRACTS (AFMC) (JUL 1997)

Paragraphs (a) and (b) of Section I, FAR 52.244-2 do not apply to the following subcontracts, which were evaluated during negotiations:

Northern Telecom, Magnavox, Motorola, Cisco, Systran, Spire, Silicon Graphics, Hummingbird, Cim Solutions, SelectTech Services Corporation, and MacAulay Brown.

This consent shall in no way relieve the contractor of any responsibility for performing this contract; shall not create any obligation of the Government to, or privity with, these subcontractors; shall be without prejudice to any right or claim of the Government under this contract; and shall not constitute a determination of the acceptability of the subcontract terms or conditions or the allowability of any costs under this contract. Any further request for consent, as required by the "Subcontracts" clause, must be processed through the cognizant Administrative Contracting Officer.

18. 5352.245-9000 GOVERNMENT FURNISHED PROPERTY (GFP) (AFMC) (JUL 1997)

Pursuant to the Government Property clause herein, the Government will furnish the item(s) of property listed in attachment A, Section J hereto as Government Furnished Property (GFP) to the contractor, F.O.B. Destination, for use in performance of this contract. Upon completion of the contract, the contractor will obtain disposition instructions from the Government Property Administrator of the activity having responsibility for administration of the contract.

19. 5352.245-9004 BASE SUPPORT (AFMC) (JUL 1997)

Base support shall be provided by the Government to the Contractor in accordance with this clause. Failure by the Contractor to comply with the requirements of this clause shall release the Government, without prejudice, from its obligation to provide base support by the date(s) required. If warranted, and if the Contractor has complied with the requirements of this clause, an equitable adjustment shall be made if the Government fails to provide base support by the date(s) required.

a. Base support includes Government-controlled working space, material, equipment, services (including automatic data processing), or other support (excluding use of the Defense Switched Network (DSN)) which the Government determines can be made available at, or through, any Air Force installation where this contract shall be performed. All Government property in the possession of the Contractor, provided through the base support clause, shall be used and managed in accordance with the Government Property clauses.

b. The Air Force installations providing the support shall be listed in subparagraph (e), and the Government support to be furnished by each installation under this contract shall be listed in subparagraph (f).

c. Unless otherwise stipulated in the contract schedule, support shall be provided on a no-charge-for-use basis and the value shall be a part of the Government's contract consideration.

d. The Contractor agrees to immediately report (with a copy to the cognizant CAO) inadequacies, defective Government-Furnished Property (GFP), or nonavailability of support stipulated by the contract schedule, together with a recommended plan for obtaining the required support. The Government agrees to determine (within 10 workdays) the validity and extent of the involved requirement and the method by which it shall be fulfilled (e.g., purchase, rental, lease, GFP, etc.). Facilities shall not be purchased under this clause. Additionally, the Contractor (or authorized representative) shall not purchase, or otherwise furnish any base support requirement provided by the clause (or authorize others to do so), without prior written approval of the Contracting Officer regarding the price, terms, and conditions of the proposed purchase, or approval of other arrangements.

e. Following are installations where base support will be provided: (See Section H)

f. The Government support to be furnished under this contract is listed in Section H. Because of the nature and location(s) of the work performed, the value of such equipment is undeterminable. The Contractor shall not incur any cost resulting from nonsupport prior to Contracting Officer concurrence in accordance with this clause.

20. 5352.245-9012 RENT-FREE USE OF GOVERNMENT-OWNED PROPERTY (AFMC) (JUL 1997)

The contractor is authorized to use in the performance of this contract on a rent-free, non-interference basis the government-owned property identified in GFP Section J, Attachment 3 hereto, made available from contract award through contract completion.

21. 5352.227-9000 EXPORT-CONTROLLED DATA RESTRICTIONS (AFMC) (JUL 1997)

a. For the purpose of this clause,

(1) Foreign person is any person who is not a citizen or national of the U.S. or lawfully admitted to the U.S. for permanent residence under the Immigration and Nationality Act, and includes foreign corporations, international organizations, and foreign governments;

(2) Foreign representative is anyone, regardless of nationality or citizenship, acting as an agent, representative, official, or employee of a foreign government, a foreign-owned or influenced firm, corporation or person;

(3) Foreign sources are those sources (vendors, subcontractors, and suppliers) owned and controlled by a foreign person.

b. The Contractor shall place a clause in subcontracts containing appropriate export control restrictions, set forth in this clause.

c. Nothing in this clause waives any requirement imposed by any other U.S. Government agency with respect to employment of foreign nationals or export controlled data and information.

d. Equipment and technical data generated or delivered under this contract are controlled by the International Traffic in Arms Regulation (ITAR), 22 CFR Sections 121 through 128. An export license is required before assigning any foreign source to perform work under this contract or before granting access to foreign persons to any equipment and technical data generated or delivered during performance (see 22 CFR Section 125). The Contractor shall notify the Contracting Officer and obtain written approval of the Contracting Officer prior to assigning or granting access to any work, equipment, or technical data generated or delivered under this contract to foreign persons or their representatives. The notification shall include the name and country of origin of the foreign person or representative, the specific work, equipment, or data to which the person will have access, and whether the foreign person is cleared to have access to technical data (DoD 5220.22-M, National Industrial Security Program Operating Manual (NISPOM)).

SECTION J LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

<u>IDENT</u>	<u>DATE</u>	<u>TITLE</u>	<u>NO. OF PAGES</u>
Atch #1	97JUN05	Statement of Work (SOW) Avionics Communication, Navigation, Identification Exploration	3
Atch #2	97OCT17	Contract Security Classification (DD Form 254)	5
Atch #3	undated	Government Furnished Property Listing	2
Exhibit A	97MAR18	Contract Data Requirements List, DD Form 1423	12

1A.3 Statement of Work

1A.3.1 Background

The ACE facility provides research and development services to the military community for the advancement of technologies required to achieve next generation integrated CNI avionics and the development of advanced avionics concepts. The current emphasis, though only a portion of the total facility vision, is concentrated on GPS and Embedded GPS Inertial Navigation System (INS) testing and support. The purposes of this effort are to: 1) continue current capability and support while expanding and improving the capability to develop and demonstrate technologies - to enable cost-effective evaluations/demonstrations of advanced avionics architectures; 2) define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems; and, 3) evaluate CNI simulation and advanced integration technologies.

1A.3.2 Scope of Work

The contractor shall provide engineering hardware and software development services to the ACE facility to conduct enhanced CNI modeling and simulation and support the ongoing modeling and simulation efforts. The contractor shall define and demonstrate technology to enable cost effective evaluations and demonstrations of advanced avionics architectures. The contractor shall define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems.

1A.3.3 Applicable Documents

Applicable documents will be determined on a delivery order by delivery order basis.

1A.3.4 Requirements

The contractor shall develop and demonstrate technology to:

- 1) enable cost-effective evaluations and demonstrations of advanced avionics architectures;
- 2) define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems; and,
- 3) evaluate CNI simulation and advanced integration technologies.

1A.3.4.1 Studies

The contractor shall conduct technology studies to identify requirements, assess feasibility of advanced technologies, assess applications to advanced military CNI systems, assess technology as a basis for planning future R&D and applications, and other studies as required. (CDRL A001)

1A.3.4.2 Hardware/Software Development and Data Analysis

The contractor shall design, develop, fabricate and test technologies and techniques to evaluate CNI simulation and CNI advanced system integration, including real-time avionics hardware-in-the-loop simulation technologies. The contractor shall evaluate and implement software and software tools in support of CNI R&D. The contractor shall investigate, develop, and demonstrate methods for data analysis capabilities and techniques. (CDRLs A001, A009, A010, A011)

1A.3.4.2.1 ACE Maturation

The contractor shall provide engineering services to maintain, modify, and enhance the ACE facility to explore advanced CNI evaluation capabilities and advanced research and development. The contractor shall conduct studies of new, future and advanced technologies, and perform hardware and software analysis to develop the ACE facility in three major growth segments as delineated herein, conducting demonstrations of the enhanced capabilities. The contractor shall establish requirements, and design, develop, and demonstrate technology improvements to the ACE

- 1) to upgrade the GPS test capability;
- 2) to upgrade the assets within the ACE for advanced CNI evaluation and R&D; and
- 3) to integrate the ACE with complimentary avionics laboratory assets.

The contractor shall also perform data reduction and analysis of CNI evaluation results conducted by the ACE and provide services to maintain and operate the ACE facility. (CDRLs A001, A009, A010, A011)

1A.3.4.3 Technology Demonstration

The contractor shall perform demonstrations of techniques, methodologies, and processes which support CNI and Collaborative Engineering Environment (CEE) research.

1A.3.4.3.1 Collaborative Engineering Environment Enhancements

The contractor shall establish requirements, and design, develop, and demonstrate technology improvements to the ACE to integrate the ACE with complimentary avionics laboratory assets to enhance the ability to evaluate advanced CNI systems. (CDRLs A001, A006, A007, A007, A009, A010, A011)

1A.3.4.3.2 Laboratory Maintenance and Operation

The contractor shall provide the personnel and skills to support the daily maintenance and operation of the ACE facility. The contractor shall provide materials, replacement components, and parts, as required to prevent or eliminate malfunctions and enhance, upgrade or improve capabilities of laboratory hardware. The contractor shall develop test plans and procedures, perform assessments and conduct evaluations and demonstrations in the ACE facility to advance the development and evaluation of future CNI Systems.

1A.3.5 Management

The contractor shall exercise administrative and financial management functions during the course of this effort such as: scheduling of activities and milestones; reporting status of progress toward accomplishment of objectives; planning the project; preparing for and conducting program reviews and presentations; and describing in detail the overall results of the effort. (CDRLs A001, A002, A003, A004, A005, A006, A007, A008)

**DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION SPECIFICATION**

(The requirements of the DoD Industrial Security Manual apply to all security aspects of this effort)

1. CLEARANCE AND SAFEGUARDING

a. FACILITY CLEARANCE REQUIRED

SECRET

b. LEVEL OF SAFEGUARDING REQUIRED

b NA

2. THIS SPECIFICATION IS FOR: (X and complete as applicable)

a. PRIME CONTRACT NUMBER
F33615-97-D-1045

b. SUBCONTRACT NUMBER

☒ c. SOLICITATION OR OTHER NUMBER
F33615-97-R-1045

Due Date (YYMMDD)

3. THIS SPECIFICATION IS: (X and complete as applicable)

a. ORIGINAL (Complete date in all cases)

Date (YYMMDD)

97 03 13

☒ b. REVISED (Supersedes all previous specs)

Revision No.

1

Date (YYMMDD)

97 10 17

c. FINAL (Complete item 5 in all cases)

Date (YYMMDD)

4. IS THIS A FOLLOW-ON CONTRACT?

☐ YES

☒ NO

If Yes, complete the following:

Classified material received or generated under

Previous Contract Number is transferred to this follow-on contract

5. IS THIS A FINAL DD FORM 254?

☐ YES

☒ NO

If Yes, complete the following:

In response to the contractor's requested dated

retention of the identified classified material is authorized for the period of

6. CONTRACTOR (Include Commercial and Government Entity (CAGE) Code)

a. NAME, ADDRESS, AND ZIP CODE

**TRW INC.
P.O. Box 289000
San Diego CA 92128-9000**

b. CAGE CODE

65409

c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)

**DIS
Director of Industrial Security
3605 Long Beach Blvd.
Long Beach CA 90807-4013**

7. SUBCONTRACTOR

a. NAME, ADDRESS, AND ZIP CODE

NA

b. CAGE CODE

NA

c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)

NA

8. ACTUAL PERFORMANCE

a. LOCATION

NA

b. CAGE CODE

NA

c. COGNIZANT SECURITY OFFICE (Name, Address, and Zip Code)

NA

9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

The Avionics CNI Concepts Exploration (ACE) technical effort will focus on the development and demonstration of technology to enable cost-effective evaluations/demonstrations of advanced avionics architectures; and define and demonstrate techniques, methodologies, and processes to promote research in advanced CNI avionics systems.

10. THIS CONTRACT WILL REQUIRE ACCESS TO:

YES

NO

a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION

☒

b. RESTRICTED DATA

☒

c. DESIGN, NUCLEAR WEAPON DESIGN INFORMATION

☒

d. EXTREMELY RESTRICTED DATA

☒

e. INTELLIGENCE INFORMATION

☐

f. Sensitive Compartmented Information (SCI)

☒

g. Kinetic

☒

h. SPECIAL ACCESS INFORMATION

☒

i. NATO INFORMATION

☒

j. FOREIGN GOVERNMENT INFORMATION

☒

k. LIMITED DISSEMINATION INFORMATION

☒

l. FOR OFFICIAL USE ONLY INFORMATION

☒

m. OTHER (Specify)

☐

11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:

YES

NO

a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY

☒

b. RECEIVE CLASSIFIED DOCUMENTS ONLY

☐

c. RECEIVE AND GENERATE CLASSIFIED MATERIAL

☒

d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE

☒

e. PERFORM SERVICES ONLY

☒

f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S. PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES

☒

g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER

☒

h. REQUIRE A COMSEC ACCOUNT

☒

i. HAVE TEMPEST REQUIREMENTS

☒

j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS

☒

k. BE AUTHORIZED TO USE THE DEFENSE COUNCIL SERVICE

☒

l. OTHER (Specify) Pre-contract award access to classified information is not required. Notification of Government Security Activity is required

☒

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by the Government authority. Proposed public releases shall be submitted for approval prior to release.

☐ Direct ☒ Through Specific:

ASC/PA Bldg 14
1865 4th Street, Suite 15
WPAFB OH 45433-6503

13. SECURITY GUIDANCE. The security classification guidance used for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. (If it is as appropriate for the classified effort, Attach, or forward any correspondence, any documents/publications reference herein. Add additional pages as needed to provide complete guidance.)

- Ref Blk 10a: COMSEC and/or cryptographic requirements apply. See Addendum.
- Ref Blk 10e(2): General Intelligence Material/Foreign Disclosure applies. See Addendum.
- Ref Blk 10j: For Official Use Only (FOUO) applies. See Addendum.
- Ref Blk 11a: Releasing Government activity will furnish complete classification guidance for the service to be performed. Contractor performance is restricted to Bldg 620, Area B.
- Ref Blk 11i: On-base performance in Area B, Bldg 620, WPAFB OH 45433-7334.
- Ref Blk 11i: The Notification of Government Security Activity and visitor group security agreement clause applies: See contract clause in Section I for details.
- Transfer of documents to other IR&D efforts is not permitted.
- The National Industrial Security Program Operating Manual (NISPOM), Jan 95, applies.
- Program Manager: Lydia M. Harris, WL/AAST, 255-4854 x 4186

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. (If Yes, identify specific requirements in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use item 13 if additional space is needed.)

☐ Yes ☒ No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. (If Yes, identify specific areas of inspection and the activity responsible for inspections. Use item 13 if additional space is needed.)

☒ Yes ☐ No

Contractor performance will occur at Wright-Patterson Air Force Base Ohio. DIS is relieved of all inspection responsibility for contractor performance on the installation. ASC/SYSP will maintain security oversight.

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a. PRINTED NAME OF CERTIFYING OFFICIAL
Bettie Stealy

b. TITLE
Contracting Officer

c. TELEPHONE (Include Area Code)

((37) 255-5252

1. ADDRESS (Include Zip Code)

WL/AAK
Bldg 7
Wright-Patterson AFB OH 45433

2. SIGNATURE

Bettie L Stealy

17. REQUIRED DISTRIBUTION

- ☒ a. CONTRACTOR
☒ b. SUBCONTRACTOR
☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
☐ e. ADMINISTRATION CONTRACTING OFFICER
☒ f. OTHER AS NECESSARY

ASC/SYSP

DD Form 254, DEC 90 (REVERSE) (EF-V1) (P) (FORM PRE)

F33615-97-D-1045

17 Oct 97 SM

Section J

ATCH 2

Pg 2 of 5

GENERAL INTELLIGENCE MATERIAL/FOREIGN DISCLOSURE

1. **Special Requirements for General and Foreign Intelligence Material.** In addition to the requirements and controls for classified material, the Director, Central Intelligence, sets up additional requirements and controls for intelligence in the possession of contractors. The contractor must:

a. Maintain control of all intelligence materials released in his or her custody in accordance with DOD 5220.22-M, the National Industrial Security Program Operating Manual (NISPOM), January 1995, paragraphs 5-200, 201 and 202 for control. Contractors agree that all intelligence material released, all reproductions and other material generated (including reproductions) are the property of the US Government.

b. Maintain control of all reproduced intelligence data in the same manner as the original.

c. Destroy intelligence materials in accordance with approved methods identified in the NISPOM.

d. Restrict access to those individuals with a valid need-to-know who are actually providing services under the contract. Further dissemination to other contractors, subcontractors, or other government agencies and private individuals or organization is prohibited unless authorized in writing by the Contracting Officer's Representative (COR) with prior approval of ASC/NAIC/POA.

e. Not release intelligence data to foreign nationals or immigrant aliens, regardless of their security clearance or contract status, without advance written permission from the COR, Foreign Disclosure Policy Office (ASC/SYSR), and ASC/NAIC/POA.

f. Ensure that each employee having access to intelligence material is fully aware of the special security requirements for this material.

2. **Returning Intelligence to the Air Force.** Contractors must return intelligence data to the COR at the termination or completion of a contract unless the COR has provided written approval for the contractor to retain for an additional two years. If retention is required beyond the two year period, the contractor must again request and receive written retention authority from the COR. If the COR grants retention authority, he or she must provide a copy of the written approval to ASC/NAIC/POA.

3. **Release of Classified and Unclassified Information to Foreign Government and Their Representatives.** Any military activity or defense contractor receiving a request from a foreign government or a representative thereof, for intelligence data about this program, shall forward the request to ASC/SYSR and ASC/NAIC/POA. Information released under Foreign Military Sales (FMS) must comply with the specific USAF disclosure guidance issued for the specific FMS customer.

21 August 1996

USE OF SPECIAL INTELLIGENCE MARKINGS1. Authorized Control Markings of Intelligence Information

a. "Dissemination and Extraction of Information Controlled by Originator (ORCON)".

This marking is used only on classified intelligence that clearly identifies or would reasonably permit ready identification of intelligence sources or methods that are particularly susceptible to countermeasures that would nullify or measurably reduce their effectiveness. It is used to enable the originator to maintain continuing knowledge and supervision of the further use of intelligence beyond the original dissemination. This control marking may not be used when an item of information will reasonably be protected by use of any other markings specified herein, or by the application of the "need-to-know" principle and safeguarding procedures of the security classification system.

b. "Not Releasable to Foreign Nationals (NOFORN)"

This control marking is used to identify classified intelligence material that may not be released in any form to foreign governments, foreign nationals, or non-US citizens without permission of the US Government originator, and then only when released in compliance with the National Disclosure Policy.

c. "Authorized for Release to (Name of country(ies)/international organization"

This marking is used to identify classified intelligence material that the US Government Originator has predetermined to be releasable or has been released through established foreign disclosure channels to the indicated country(ies) or organization.

2. Procedures Governing Use of Control Markings

a. Any recipient desiring to use intelligence in a manner contrary to the restrictions established by the control markings set forth above, shall obtain the advanced permission of the originating agency. Such permission applies only to the specific purposes agreed to by the originator and does not automatically apply to all recipients. Originator will ensure that prompt consideration is given to recipients' requests, with particular attention to reviewing and editing if necessary, sanitized or paraphrased versions to derive a text suitable for release subject to lesser or no control markings.

b. The control markings authorized above shall be shown on the title page, front cover, and other applicable pages of documents, incorporated in the text of electrical communications, shown on graphics, and associated (in full or abbreviated form) with data stored or processed in automatic data processing systems. The control markings also shall be indicated by parenthetical use of the markings abbreviations at the beginning or end of the appropriate portions. If the control markings apply to several or all portions, the document may be marked with a statement to this effect rather than marking each portion individually.

c. The control markings in paragraph one (1) shall be individually assigned at the time of preparation of intelligence products and used in conjunction with security classifications and other markings specified by EO 12958 and its implementing ISOO Directive. The markings shall be carried forward to any new format in which the same information is incorporated including oral and visual presentations.

Current Guidance
Implementation of DCID 1/7, 16 Apr 96, Postponed.

FOR OFFICIAL USE ONLY

The following procedures will be used to protect FOR OFFICIAL USE ONLY (FOUO) information.

1. **HANDLING:** Access to FOUO material shall be limited to those employees who need the material to do their jobs. The FOR OFFICIAL USE ONLY marking is assigned to information when created by a DOD User Agency. FOR OFFICIAL USE ONLY is not a classification, but requires extra precautions to ensure it is not released to the public.

2. **MARKING:**

a. Mark an unclassified document containing FOUO information "FOR OFFICIAL USE ONLY" at the bottom of each page containing FOUO information and on the bottom of the front page or front cover (if any) and on the back of the last page and on the back cover (if any).

b. In a classified document, mark:

- An individual paragraph that contains FOUO, but not classified information, by placing "(FOUO)" at the beginning of the paragraph.

- The top and bottom of each page that has both FOUO and classified information, with the highest security classification of the information on that page.

- "FOUO" at the bottom of each page that has FOUO but not classified.

- If a classified document also contains FOUO information or if the classified material become FOUO when declassified, place the following statement on the bottom of the cover or the first page, under the classification marking:
"NOTE: If declassified, review the document to make sure material is not FOUO and not exempt under AFI 37-131 before public release.

c. Mark other records, such as computer print outs, photographs, films, tapes, or slide "FOR OFFICIAL USE ONLY" so that the receiver or viewer knows the record contains FOUO information.

d. Mark each part of a message that contains FOUO information. Unclassified messages containing FOUO information must show the abbreviation "FOUO" before the text begins.

e. Make sure that documents that transmit FOUO materials call attention to any FOUO attachments.

f. Any FOUO material released to a contractor by a DOD User Agency must have the following statement on the front page or cover: **THIS DOCUMENT CONTAINS INFORMATION EXEMPT FROM MANDATORY DISCLOSURE UNDER THE FREEDOM OF INFORMATION ACT. EXEMPTION(S) _____ APPLY.**

3. **STORAGE:** To safeguard FOR OFFICIAL USE ONLY records during normal duty hours, place them in an out-of-sight location if your work area is accessible to persons who do not have a valid need for the information. After normal duty hours, store FOUO records to prevent unauthorized access. File them with other unclassified records in unlocked files or desks when internal building security is provided. When there is not internal security, locked buildings or rooms usually provide adequate after-hours protection. For additional protection, store FOUO material in locked containers such as file cabinets, desks, or bookcases. Expenditure of funds for security containers or closed areas solely for the protection of FOUO data is prohibited.

4. **TRANSMISSION:** FOUO material shall be transmitted by the same methods as other UNCLASSIFIED material. Discussion of FOUO material on the telephone is authorized if necessary for performance of the contract. FOUO information may be transmitted over telephone lines in digital form, by telecopies, or by other DSN teletype lines without encryption.

5. **RELEASE:** FOUO information shall not be released outside the contractor's facility except to representatives of the DOD.

6. **DESTRUCTION:** When no longer needed, FOUO information may be disposed of by a method which will preclude its disclosure to unauthorized individuals.

GOVERNMENT FURNISHED PROPERTY FOR ACE

The following Government property will be provided to the contractor at contract award, and will be available throughout the performance period:

<u>QTY</u>	<u>MODEL NO.</u>	<u>DESCRIPTION</u>
3	PTS-500	Frequency Synthesizer
3	8566B	Spectrum Analyzer
3	5342A	Microwave Frequency Counter
2	436A	Power Meter
1	438A	Power Meter
3	TM5000	Mainframe with the following plug-ins:
1		a. DC5010 Programmable Digital Counter
1		b. DM5010 Programmable Digital Multimeter
1		c. DC505 Universal Counter/Timer
1		d. FG5010 Programmable Function Generator
2		e. FG504 40 MHz Function Generator
1		f. PS5010 Programmable Power Supply
1		g. SC502 Oscilloscope
1		h. DP501 Prescaler
4		i. FG502 Function Generator
2		j. DM501 Digital Multimeter
1		k. DC503 Universal Counter
1		l. PS503 Power Supply
1	8112A	Programmable Pulse Generator
4	8656B	Signal Generator
1	59401A	Programmable HP/IB Bus Analyzer
1	8903	Programmable Audio Analyzer
	MF5	Tau-Tron Bit Error Rate Test System; including two mainframes and the following associated plug-ins:
1		a. MS302 Clock Source
1		b. MN302 BERT Transmitter
1		c. MC303 Encoder
2		d. MA301 Dual I/O Amplifier
1		e. MC304 Decoder
1		f. MB302 BERT Receiver
1	BERTS-25	Tau-Tron Error Measurement System
1	8660C	Synthesized Signal Generator
1	8672A	Synthesized Signal Generator
4	11713A	Programmable Attenuator/Switch Driver
2	LRS100	Pseudo-Random Generator
4	3325A	Synthesizer/Function Generator
1	Fluke Model 72	Distribution Amplifier
1	5087A	Distribution Amplifier

1	5061A	Cesium Beam Frequency Standard
2	5065A	Rubidium Frequency Standard
2	NC7110	Programmable Noise Generator
1	8901B	Modulation Analyzer
2	8620C	Sweep Oscillator
1	3403A	True RMS Voltmeter
1	5372A	Frequency and Time Interval Analyzer
1	7580B	Plotter
1	2465DM	Oscilloscope
1	7104	Oscilloscope
2	3488A	Switch/Control Unit
1	8750A	Storage Normalizer
1	8754A	Network Analyzer
1	8748A	S-Parameter Test Set
1	1630G	Logic Analyzer
2	8640	Signal Generator
2	442	Dual Hi/Lo Filter
1	9100	Arbitrary Function Generator
3	1653B	Logic Analyzer
1	SYS300	1553 Bus Analyzer
1	SYS100	1553 Bus Analyzer
1	8753	Network Analyzer
1	71210A	Spectrum Analyzer
4	8664	Signal Generators
1	5372A	Frequency & Time Analyzer
2	8657	Signal Generator
1	465B	Oscilloscope
1	9390-6000	Exact Time GPS Time & Frequency Generator
1	STR2760	Northern Telecom GPS Simulator
1		Magnavox GPS Simulator
1	7854	Oscilloscope, digitizer

(1 Data Item)

Form Approved
OMB No. 0704-0188

OMB No. 0704-0188

1. CONTRACT LINE ITEM NO. 0001		2. EXHIBIT A		3. CATEGORY: TOP _____ TO _____ OTHER _____		4. ACRONYM REF: DOD 5010.12-L AMSDI	
5. SYSTEM/ITEM 666A0200		6. CONTRACT/PR NO. P33615-97-D-1045		7. CONTRACTOR			
8. DATA ITEM NO. A-01		9. TITLE OF DATA ITEM SCIENTIFIC AND TECHNICAL REPORTS		10. SUBTITLE Final Report: VOL I THRU VOL _____			
11. AUTHORITY (Data Acquisition Document No.) DI-MISC-80711/T		12. CONTRACT REFERENCE See Below		13. REQUIRING OFFICE WL/AAST			
14. DIST STATEMENT REQUIRED C		15. FREQUENCY ONE/R		16. DATE OF FIRST SUBMISSION __/__/__		17. DISTRIBUTION	
18. APP CODE A		19. AS OF DATE __/__/__		20. DATE OF SUBSEQUENT SUBMISSION __/__/__		21. ADDRESSEE	
						22. COPIES Dist _____ Final _____	

REMARKS: Tailored to require the official WL emblem to be placed in the upper right hand corner of the front cover with affected entries adjusted as required. I will supply a copy of the emblem; Block 13, para 10.3 is clarified so that distribution to DTIC will be through Air Force distribution channels. Further tailored to require that each delivery order report shall become a volume of this report.

At the conclusion of each Delivery Order, and at
MAC.

.. 11 days after Block 11 time, and at 57MAC

Approval/disapproval by letter from the AFDTD****
within 60 days after receipt.

Disapproval requires correction/resubmission within 30 days after receipt of Air Force comments. The final corrected version of the last volume shall be submitted no later than 60 MAC.

Draft report shall be unbound, in standard size type, double-spaced and single-sided.

Reproducible shall be a CAMERA READY, unbound, suitable for offset reproduction, and shall incorporate all changes made in the corrected draft. All photos shall be glossy finished. Submit the reproducible with the final corrected version only.

****Air Force Designated Technical Representative

Para 5: 1A.3.4.1-1A.3.4.2.1, 1A.3.4.3.1 and 1A.3.5

G. PREPARED BY LINDA M. HARRIS WLA:AST, (937)255-4854		H. DATE 18MAR97	I. APPROVED BY Les-Ann Goodman Data Manager	15. TOTAL 3 3 1	J. DATE 18MAR97
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(1 Data Item)

Form Approved
OMB No. 0704-0188

OMB No. 0704-0188

A. CONTRACT LINE ITEM NO. 0001		B. EXHIBIT A		C. CATEGORY: TOP _____ CM _____ OTHER _____		D. A REF: DOD 5010.12-L AMSD	
D. SYSTEM/ITEM 666A0200		E. CONTRACT/PR NO. F33615-97-D-1045		F. CONTRACTOR			
1. DATA ITEM NO. A 02		2. TITLE OF DATA ITEM CONTRACT FUNDS STATUS REPORT (CFER				1. SUBTITLE	
4. AUTHORITY (Data Acquisition Document No.) DI-MGMT-81468/T		5. CONTRACT REFERENCE SON Para 1A.2.5		6. REQUIRING OFFICE WL/AAST			
7. DO REQ LF		9. DIST STATEMENT REQUIRED B		10. FREQUENCY QRTLY		12. DATE OF FIRST SUBMISSION **	
8. APP CODE NA		11. AS OF DATE *		13. DATE OF SUBSEQUENT SUBMISSION **		14. DISTRIBUTION	
15. REMARKS						a. ADDRESSEE b. COPIES Draft Final	

15. REMARKS	SUBMISSION	DATE
tailored so that the report contains forecasts by month for the next six months, by quarter for the remaining fiscal year, and by year for the remaining fiscal years. CFSR data shall be reconciled to the Government's fiscal year end at 30 September if the contractor's fiscal year end does not coincide with the Government's fiscal year end.		

* The last day of the contractor's monthly accounting period nearest the end of the Government's fiscal year quarter.

2. The initial submission shall be within 25 calendar days after the close of the contractor's monthly accounting period nearest the end of the first government fiscal year quarter after contract award. Subsequent submissions shall be 25 calendar days after Block 11 time.

The contractor shall have the capability to transmit all data formats electronically via modem or E-Mail through the Defense Data Network.

[illegible]

G. PREPARED BY LINDA M. HARRIS WFOAST. (937)255-4854		H. DATE 18MAR97	I. APPROVED BY Leeley, Headman [Signature] WFOAST. (937)255-4854	TS. TOTAL 5	J. DATE 18MAR97
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(1 Data Item)

Form Approved
OMB No. 0704-0188

OMB No. 0704-0188

The reporting burden for this collection of information is estimated to average 220 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

If you wish to comment on this burden estimate or any other aspect of this collection of information, include your comments and suggestions on this form, and send it to the Government Issuing Contracting Officer for the Contract PR No. listed in Block c.

CONTRACT LINE ITEM NO. **B. EXHIBIT**

Return your form to either of these addresses. Send

A. CONTRACT LINE ITEM NO. 0001		B. EXHIBIT A	C. CATEGORY: TOP	MLA REF: DOD 5010.12-L AMSDL
D. SYSTEM/ITEM				

D. SYSTEM/ITEM 666A0200	E. CONTRACT/PR NO. F33615-97-D-1045	F. CONTRACTOR
----------------------------	--	---------------

1. DATA ITEM NO.	2. TITLE OF DATA ITEM	3. SUBTITLE
A003	SCIENTIFIC AND TECHNICAL REPORTS	Contractor's Billing Voucher

4. AUTHORITY (Data Acquisition Document No.) DI-MISC-80711/T	5. CONTRACT REFERENCE SOW Para 1A.3.5	6. REQUIRING OFFICE MT. SAC, BOSTON
---	--	--

3. DIST STATEMENT REQUIRED		10. FREQUENCY Bi-Weekly	12. DATE OF FIRST SUBMISSION	14. DISTRIBUTION
----------------------------	--	----------------------------	------------------------------	------------------

1. APP CODE	13	11. AS OF DATE	12. DATE OF SUBSEQUENT SUBMISSION	14. ADDRESSEE	15. COPIES	
2. STA					Draft	Final

15. REMARKS	Craft	Phase	
		Req	Rel

1.) to require only a photocopy of the contractor's billing voucher which is prepared by the contractor to receive payment for this contract's work, and 2.) to require the reporting of Extant Earned, Billed and Paid funds as defined herein:

Earned means amount of funds earned by the contractor and the suppliers or subcontractor's through labor or material purchases.

Billed means amount of funds that have been billed to the government by the contractor.

Paid means the amount of funds paid by the government to the contractor.

Submit voucher information monthly, through normal mail channels to all Block 14 addressees with Data Item #A004; submit the earned, billed and paid information monthly via facsimile to WL/AASST only.

G. PREPARED BY LUCIA M. HARRIS ML-CAST, (937) 255-4854		H. DATE 18MAR97	I. APPROVED BY Lee S. Smith, Sr. Data Manager, WFLA-TV 466	J. DATE 18MAR97
--	--	--------------------	--	--------------------

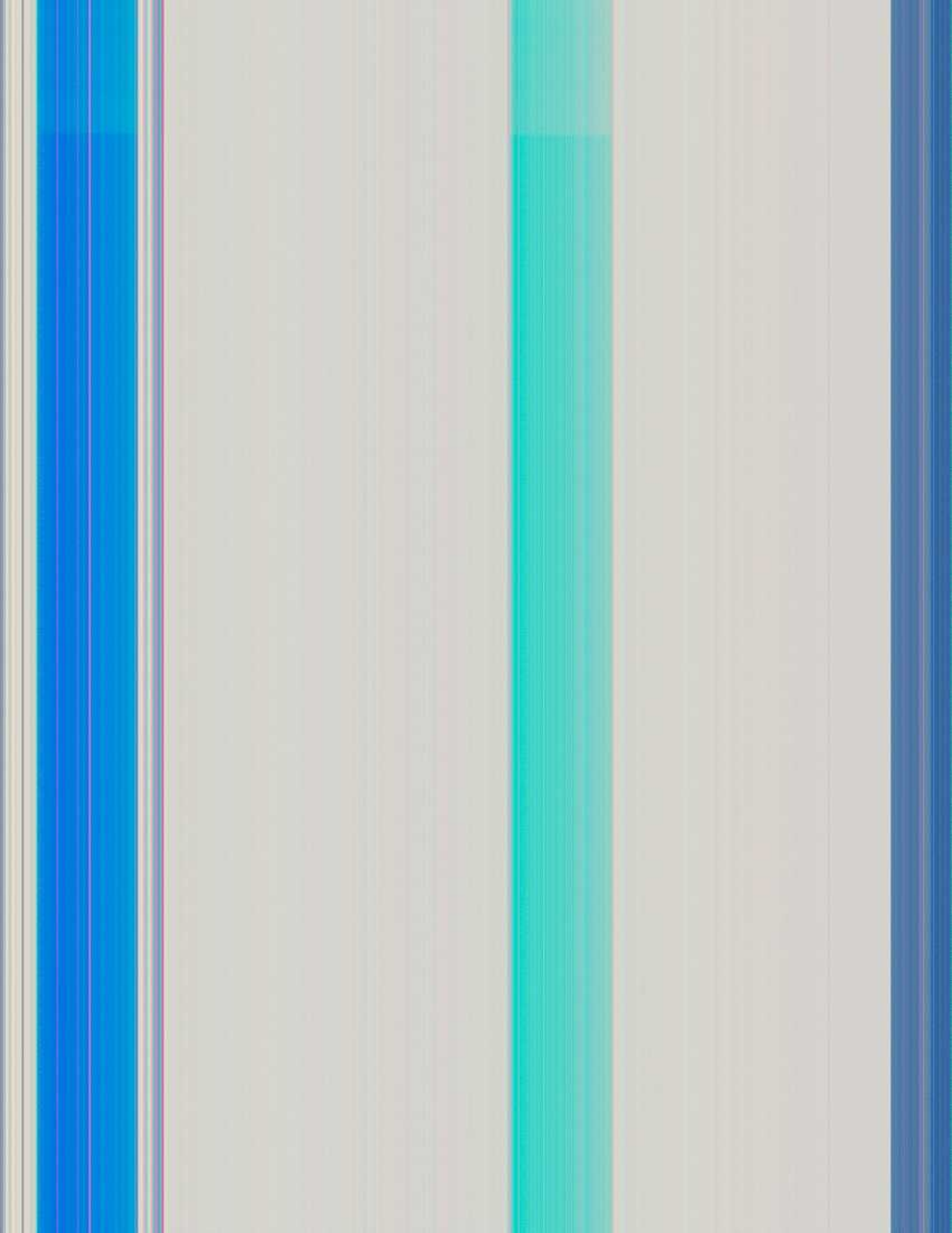
Form Approved
OMB No. 0704-0188

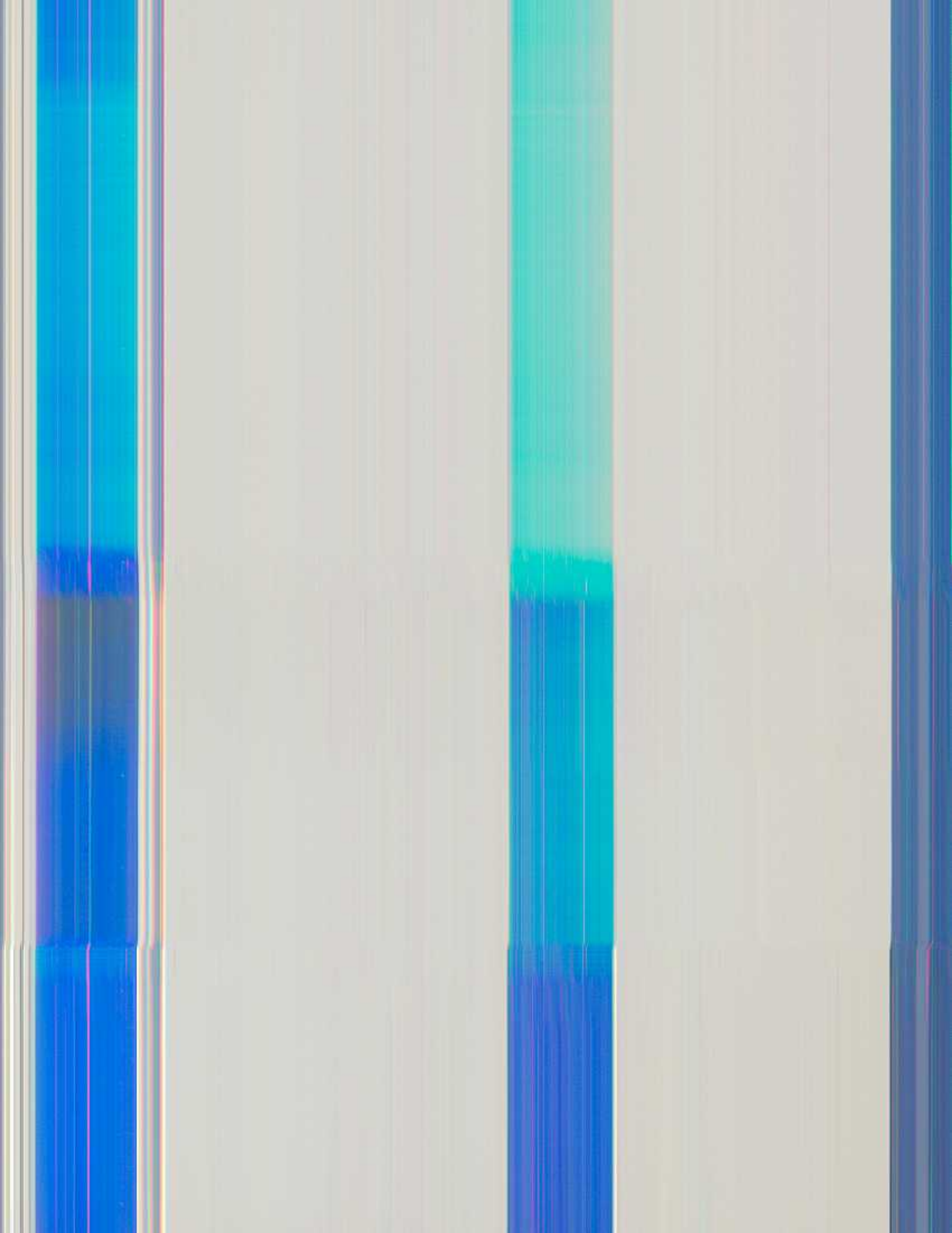
OMB No. 0704-0188

Form Approved
OMB No. 0704-0188

OMB No. 0704-0168

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Form Approved
OMB No. 0704-0188

OMB No. 0704-0188

18-00000

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0001		B. EXHIBIT A		C. CATEGORY: TOP TV OTHER		H. A REF: DOD 5010.12-L AMSDL	
D. SYSTEM/ITEM 666AD200			E. CONTRACT/PR NO. F33615-97-D-1045			F. CONTRACTOR	
1. DATA ITEM NO. 5017		2. TITLE OF DATA ITEM CONFERENCE MINUTES				3. SUBTITLE	
4. AUTHORITY (Date Acquisition Document No.) DI-ADMN-81250A/T			5. CONTRACT REFERENCE SOW Para 1A.3.4.3.1 and 1A.3.5			6. REQUIRING OFFICE WL/AAS	
7. DD 250 REQ C		9. DIST STATEMENT REQUIRED C		10. FREQUENCY ASREQ		12. DATE OF FIRST SUBMISSION	
8. APP CODE N/A		11. AS OF DATE		13. DATE OF SUBSEQUENT SUBMISSION		14. DISTRIBUTION	
15. REMARKS Tailored to allow contractor's format. ASREQ means as required to document each review or presentation. * Submit within 30 days after each review or presentation.						a. ADDRESSEE	
						b. COPIES	
						Draft Final	
						WL/AAS	
15. TOTAL						1	
G. PREPARED BY LYDIA M. HARRIS WL/AAS, (937) 255-4854				H. DATE 18MAR97		I. APPROVED BY Lester A. Friedman Data Manager	
						J. DATE 18MAR97	

17. PRICE
18. ESTIMATE
TOTAL

Form Approved
OMB No. 0704-0188

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18. $\frac{1}{2} \times 10 = 5$

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0001 B. EXHIBIT A C. CATEGORY: N/A REF: DOD 5010.12-L AMSDL
TOP TM OTHER

D. SYSTEM/ITEM 666A0200 E. CONTRACT/PR NO. F33615-97-D-1045 F. CONTRACTOR

1. DATA ITEM NO. A000 2. TITLE OF DATA ITEM COMMERCIAL OFF-THE-SHELF (COTS) MANUALS 3. SUBTITLE

4. AUTHORITY (Data Acquisition Document No.) DI-TMSS-80527 5. CONTRACT REFERENCE See Below 6. REQUIRING OFFICE WL/AAST

7. DD FORM REQ LT 8. DIST STATEMENT REQUIRED A 9. FREQUENCY ASREQ 12. DATE OF FIRST SUBMISSION *

10. AS OF DATE * 11. DATE OF SUBSEQUENT SUBMISSION * 14. DISTRIBUTION a. ADDRESSEE b. COPIES

15. REMARKS WL/AAST 1

ASREQ means as required to document the COTS prepared for COTS software and hardware.

* Submit with software or hardware as appropriate.

Para 5: SOW 1A.3.4.2, 1A.3.4.2.1 and 1A.3.4.3.1

17. PRICE

18. EQUAL

G. PREPARED BY LYDIA M. HARRIS WL/AAST, (937)255-4854

H. DATE 18MAR97

I. APPROVED BY [Signature] Data Manager WL/DOR 57466

J. DATE 18MAR97

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0001		B. EXHIBIT A	C. CATEGORY: TCP TM OTHER		N/A REF: DOD 5010.12-L AMSDL				
D. SYSTEM/ITEM 666A0200		E. CONTRACT/PR NO. F33615-97-D-1045		F. CONTRACTOR					
G. DATA ITEM NO. 101	H. TITLE OF DATA ITEM SOFTWARE USER MANUAL (SUM)		I. SUBTITLE						
J. AUTHORITY (Data Acquisition Document No.) DI-IPSC-81443/T		K. CONTRACT REFERENCE SOW Para (See Below)		L. REQUIRING OFFICE WL/AAST					
M. DD FORM REQ DT	N. DIST STATEMENT REQUIRED C	O. FREQUENCY ASREQ	P. DATE OF FIRST SUBMISSION *	Q. DISTRIBUTION					
R. APP CODE N/A		S. AS OF DATE *	T. DATE OF SUBSEQUENT SUBMISSION *	U. ADDRESSEE					
V. REMARKS Tailored to allow contractor's format. Deliver unbound on 8-1/2"x11" bond paper. * Submit with appropriate software. Para 5: 1A.3.4.2, 1A.3.4.2.1 and 1A.3.4.3.1				W. COPIES					
				Draft					
				Final					
				1. WL/AAST					
				17. TOTAL				1	
				G. PREPARED BY LYDIA M. HARRIS WL/AAST, (937)255-4854		H. DATE 18MAR97		I. APPROVED BY [Signature] Data Manager	
				J. DATE 18MAR97					

17. PREPARED BY

18. ESTIMATE TOTAL

CONTRACT DATA REQUIREMENTS LIST (1 Data Item)

Form Approved
OMB No. 0704-0188

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A. CONTRACT LINE ITEM NO. 0001		B. EXHIBIT A		C. CATEGORY: TDP _____ TM _____ OTHER _____		N/A REF: DOD 5010.12-L AMSDL	
D. SYSTEM/ITEM 666A0200		E. CONTRACT/PR NO. F33615-97-D-1045		F. CONTRACTOR			
1. DATA ITEM NO. 0001	2. TITLE OF DATA ITEM TEST PLAN			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-NDTI-80566/T		5. CONTRACT REFERENCE SOW Para (See Below)		6. REQUIRING OFFICE WL/AAST			
7. DD 150 REQ 1-1	9. DIST STATEMENT REQUIRED C	10. FREQUENCY ASREQ	12. DATE OF FIRST SUBMISSION *	14. DISTRIBUTION			
8. APP CODE A		11. AS OF DATE *	13. DATE OF SUBSEQUENT SUBMISSION *	a. ADDRESSEE		b. COPIES	
						Draft	Final
						Reg	Repro
<p>15. REMARKS</p> <p>Tailored to allow contractor's format.</p> <p>ASREQ means as required to document the plans for testing under each delivery order.</p> <p>Approval/disapproval by letter from the AFDT** within 30 days after receipt. Disapproval requires correction/resubmission within 30 days after receipt of Air Force comments.</p> <p>** Air Force Designated Technical Representative</p> <p>Para 8: 1A.3.4.2, 1A.3.4.2.1 and 1A.3.4.3.1</p>				WL/AAST		1	1
				15. TOTAL			
G. PREPARED BY LYDIA M. HARRIS WL/AAST, (937)255-4854		H. DATE 18MAR97		I. APPROVED BY Leslie T. [Signature] Data Manager		J. DATE 18MAR97	

17. PRICE OF

18. ESTIMATE
TOTAL \$

MAILING ADDRESSES APPLICABLE TO DD FORM 1423-1 ARE AS FOLLOWS:

PROJECT ENGINEER: ATTN: LYDIA HARRIS
WL/AAST BLDG 620
2241 AVIONICS CIRCLE, STE 32
WRIGHT-PATTERSON AFB, OH 45433-7334

CONTRACTING OFFICER: ATTN: BETTIE L. STEELY
WL/AAKD BLDG 7
2530 C STREET
WRIGHT-PATTERSON AFB, OH 45433-7607

FINANCE OFFICE: WL/AAF BLDG 620
2241 AVIONICS CIRCLE, STE 18
WRIGHT-PATTERSON AFB, OH 45433-7320